

The 2011 Sourcebook™ for VoIP and UC Services

*Gary Audin
Delphi, Inc.
and Steven Taylor
Co-Founder, Webtorials Analyst Division*

Sponsored by:

Fonality
Talking Business



MASERGY
Global Networking Redefined

Webtorials

TABLE OF CONTENTS

| | |
|---|-----------|
| 1. EXECUTIVE SUMMARY | 1 |
| 2. THE BUSINESS ISSUES OF CLOUD/HOSTED SERVICES..... | 2 |
| 3. PROVIDER DIRECTORY INFORMATION | 8 |
| 4. SURVEY METHODOLOGY | 13 |
| 5. PROVIDER DESCRIPTIONS | 14 |
| 6. MARKET DESCRIPTIONS | 16 |
| 7. SERVICE OFFERINGS..... | 20 |
| 8. NETWORK ACCESS TECHNOLOGIES..... | 24 |
| 9. IP AND LEGACY DEVICE SUPPORT | 25 |
| 10. GEOGRAPHIC COVERAGE AND IMPLICATIONS | 31 |
| 11. MARKET IMPLICATIONS | 36 |

1. Executive Summary

This Sourcebook on cloud/hosted communications service providers was originally published in four installments. In this document, all four installments are combined to provide a single, consolidated and concise reference.

The survey was sent to 210 providers who promoted their communications services on their websites. A total of 60+ providers responded to the survey between late December 2010 and March 2011. The survey included 20 multi-part questions plus provider contact information.

- Chapters 1 through 3 cover the business value of cloud/hosted communications services and a directory of the providers who responded to the survey.
- Chapters 4 through 6 contain information and tables discussing the survey methodology (how the survey was conducted and the provider responses), provider descriptions (customer size, service names, CPE supplied) and market descriptions (wholesale, retail, service residency).
- Chapters 7 through 9 contain information and tables discussing service offerings (21 different services), network access technologies (Internet, MPLS, private line....) and IP and legacy device support (phones, modems, FAX.....).
- Chapters 10 and 11 contain information and tables discussing provider geographic coverage, maintenance and on-site support (U.S., Canada, Mexico, international) and market/provider analysis (who buys what and their priorities and state of the market).

Full database access is available to subscribers to [Webtorials / Delphi Consulting Services Hosted and Cloud-Based VoIP and Unified Communications Services.](#)

Disclaimer:

The entries in all of the tables were taken from the provider responses, not from their websites to insure as much accuracy as possible. Webtorials does not accept any responsibility for any inaccuracies in the information provided.

2. The Business Issues of Cloud/Hosted Services

Considering the Cloud/Hosted Service

Moving to a cloud/hosted solution for communications is the next big thing for CIOs to consider. The cloud/hosted solution offers rapid expansion capability, flexibility, cost control and expense reduction.

There are cloud/hosted IP Telephony (IP PBX), Unified Messaging (UM), call center and Unified Communications (UC) services. The services can also support backup and recovery for remote offices and deliver business continuity at a lower cost. Acquisition and support costs can be significantly reduced. Service levels may even be improved. Think of a cloud/hosted solution as Communications as a Service (CaaS), communications in the cloud.

The value of CaaS or hosted communications is that the enterprise accesses the services through the Internet (about 96%) or other network access technologies to gain use of managed technology services. The enterprise does not necessarily buy hardware (though in reality the enterprise needs endpoints, like IP phones, and some internal network to access the services) or software. The use of a pool of servers, either dedicated or shared at the cloud/hosted site, is a form virtualization shared by multiple customers.

The services, e.g., communications, are delivered as a common set of features and functions. The enterprise subscribes to the features and functions desired. The financial arrangements for access can be by the seat, the feature, usage or unlimited usage and flat fee. At this time there is no standard agreement on the service pricing model. The pricing models are still being evolving. This makes it somewhat difficult to compare cloud/hosted provider's charges. The promise of lower cost to the enterprise is the major attraction when considering cloud/hosted communications services.

Why Look at the Cloud/Hosted Solution

Reducing costs is almost always the primary driver for considering a hosted solution. The first benefit is a controlled and predictable cost. This is typically what drives the enterprise to look at cloud/hosted services. Because the cloud/hosted site is shared with many other subscribers, the overall hardware, software and operations costs can be prorated over the subscribing organizations.

However there are other advantages that can accrue to the subscriber to cloud/hosted communications services;

- *Flexible sizing* – The cloud/hosted solution can expand or reduce the number of seats very quickly. This is especially useful when the number of active seats varies by season or for special events or situations or emergencies.
- *Business continuity/reliability* – The cost of high availability (99.999%) may be beyond most budgets. The continued operation when a disaster occurs and the

rapid recovery of communications services is financially more affordable with a cloud/hosted solution than if the enterprise tried to produce the same level of business continuity on the enterprise site(s).

- *Staffing* – The enterprise IT staff responsibilities are significantly less with a cloud/hosted solution. The IT staff can be smaller and will not require expensive certification training to support premise based/owned systems. The IT function will primarily deal with service administration.
- *Software* – The enterprise does not have to deal with and pay for software subscription fees and licensing costs.
- *Management* – The enterprise does not have to allocate significant time to managing the solution. Enterprise management will deal with a contract that can have very specific deliverables and Service Level Agreements (SLAs).
- *Features and functions* – The enterprise can gain access to features and functions that are not available on their existing system/service or that are too expensive to implement.

Cloud/Hosted Provider vs. Internal Solution

It is quite common that enterprises look at the features and functions offered by a purchased/leased system vs. what is offered by a cloud/hosted solution. The technical requirements are usually the initial concern. This is important, but the business issues will have longer lasting impact on the solution's acceptability. The table below summarizes the business issues that must be considered comparing the cloud/hosted service and premises system (owned by the enterprise) solutions.

Comparing the Hosted and Premises System Solutions

| Issues | Cloud/Hosted | Premises System |
|-----------------------------|--|--|
| Cost | Expense Dollars | Capital and Expense Dollars |
| Provider Financial Strength | An Issue for Startups | Probably Not an Issue |
| Contract Issues | Evolving and Can Be Complex | Dealing with Standard VAR and Vendor Contracts |
| Legal Implications | What Liabilities are Accepted by the Provider? | Enterprise Responsibility |
| Business Continuity | Network Connection is Biggest Concern | Enterprise Responsibility |
| IT Staffing | Mostly Provider Responsibility | Enterprise Responsibility |
| Certifications | Provider Responsibility | Enterprise Responsibility |
| Security/Privacy | Mostly Provider Responsibility | Enterprise Responsibility |
| Compliance and Regulations | Mostly Provider Responsibility | Enterprise Responsibility |

Security, Privacy and Compliance

Regulatory, security and compliance issues can hinder the cloud/hosted solution implementation. How much responsibility will the provider accept? What happens when the requirements are not met? Is the enterprise left with holding the bag?

Contracts for the issues covering the services can become very complex with the provider trying to limit their liabilities. This could make the enterprise hesitant to move their functions onto the cloud/hosted solution.

The security issue is being pursued by the Cloud Security Alliance (CSA). The mission statement for the CSA is;

“To promote the use of best practices for providing security assurance within Cloud Computing, and provide education on the uses of Cloud Computing to help secure all other forms of computing.”

The CSA objectives and recommendations are the same for hosted services. [The CSA website](#) states that:

“The issues and opportunities of cloud computing gained considerable notice in 2008 within the information security community. It was at a security practitioners' conference, the ISSA CISO Forum in Las Vegas, November 20, 2008, where the concept of the Cloud Security Alliance was born. Following a presentation of emerging trends by Jim Reavis that included a call for action for securing cloud computing, Reavis and Nils Puhlmann outlined the initial mission and strategy of the Cloud Security Alliance. A series of organizational meetings [were held] in early December 2008.”

The primary decision is determine the risk associated with moving functions to a service, security being a major consideration. For anyone considering moving functions to a cloud/hosted solution, the security issue will probably be the hardest to resolve.

In December 2009, the CSA published “Security Guidance for Cloud Areas of Focus in Cloud Computing V2.1”, a [76 page document](#).

For those new to the cloud/hosted services, the CSA guidance document has an excellent introduction, section I, “Cloud Architecture”. The 17 pages of introduction cover the entire set of cloud/hosting considerations and how they operate. Mapping the cloud/hosting model for Compliance is shown to be a subset of the Security Control Model which in turn is part of the cloud/hosting model. What applies to cloud security applies to hosting security.

Legal Considerations

Cloud/hosted services have legal implications as well. Service planning should include the legal department. Should all users have access to all features and functions? For instance, one enterprise decided to limit UC availability for some of their users to deal with compliance regulations. If the communications is in any electronically stored form, E-Discovery as well as other requirements will be applied to the service. Plan for them and avoid the legal surprises.

When you contract for a service that needs to be secure and meet compliance and/or regulatory requirements, read the fine print. Have your lawyers be very critical and precise in their review of the provider's responsibilities and liabilities and the liabilities not accepted by the provider.

Another issue is the ownership of the information resident at the cloud/hosted site. Most enterprises would automatically expect the information passing through the site is theirs and not owned by the provider. What about the information on the individual users? How

about the traffic information that is sent and received? If presence is involved, can that presence information be sold to others? Will the provider use their access to the enterprise's users to send out information created by third parties for the sale of products or services? Would the provider be able to sell profile information of the enterprise's users to third parties?

The provider will define the Acceptable Use Policies (AUP). The AUP will probably favor the provider's business model and revenue. Read your AUP for your present ISP service to get an idea of the unbalanced arrangement that favors the providers.

Business Considerations

Independent of the technology concerns, there are a number of questions that need to be addressed when considering a particular service provider.

- *Financial Strength* – Is this provider venture capital backed or profit making? Is the provider going through any financial difficulties?
- *Delivery in the Enterprise's Geographic Market* – Can the services and supporting CPE be delivered wherever the enterprise has facilities?
- *Is The Solution A Combination of Vendors and Providers?* - Is the final solution made up of more than one vendor's products and services? If so, who is the prime solution provider and how do the other partners integrate their products and services?
- *Where Does the Service Fit in the Overall Vendor Product and Service Strategies?* – Is it the primary product/service, an addition to an IP telephony solution or a small part of the provider's portfolio?
- *Is the Provider Re-organizing its Structure?* – Reorganization can mean some discontinuity in service deployment and support as well as delaying service enhancements during and after re-organization.
- *Is the Solution Really a Partnership?* – Is the service offered really a collection of separate products and services combined under an umbrella service?
- *Is the Solution a Set of Recent Acquisitions/Mergers?* – Recently acquired components (software and hardware) may not interoperate well. The solution support may be fragmented. What is the state of the integration of the providers?
- *Is the Product Delivered Directly or Indirectly?* – When subscribing to a solution through a third party, then that third party's capabilities will be just as important as the primary provider's capabilities.

- *Is the Provider's Focus on All Elements?* – The focus may be more on IT or telecom, not the full range of communications capabilities such as UC, conferencing and call center functions.
- *Does the Provider Have an Established Record in Your Vertical Market?* – Experience counts for developing confidence in the provider. New vertical market services will almost always have some initial deployment problems. Experience in your vertical market produces confidence in the provider.
- *Does the Provider Have IT as Well as Telecom and Contact Center Experience?* – The broader the experience, the more likely that the provider will be able to deliver the range of communications features and functions successfully.
- *Is the Service a Recent Announcement?* – The newer the service, the less stability that service may deliver. You do not want to be the provider's test lab.

The decision to effectively outsource part or all of an enterprise's communications services is more than a technical decision. This Sourcebook deals with the value, business and financial issues associated with contracting with a cloud/hosted communications service provider.

3. Provider Directory Information

The following tables list all of the providers who responded to the survey. Not all of the entries in each column are consistent. The tables contain the provider responses and have not been modified by the authors. As can be observed, service names vary considerably so the enterprise should be cautious when trying to describe the service required with the providers since confusion may occur. The contact information may contain a person's name, phone number, e-mail address and/or the provider's website URL. Most of the providers focus on business services. A small number of providers offer services to both consumers and businesses. The geographic coverage column summarizes the provider coverage. A more detailed description of geographic coverage is provided in [Chapter 10](#). Any blank spaces in the tables indicate that no answer was specified by the provider.

| Table 1: Provider Directory Information | | | | |
|---|---|--|--------------------------------------|--|
| Company Name | Service Name | Contact | Services (Consumer / Business) | Geographic Coverage (North America / International) |
| Fonality | Fonality Connect | www.fonality.com sales@fonality.com (888) 768-3770 | Business | Both |
| Masergy Communications Inc. | Masergy Marketplace | www.masergy.com sales@masergy.com (866) Masergy | Business | Both |
| 8x8, Inc. | 8x8 Virtual Office, 8x8 Virtual Office Pro | http://www.8x8.com 8x8sales@8x8.com (866) 879-8647 | Both | Both |
| Abtech | Abtech Hosted PBX | www.abtech.com tcook@abtech.com (410) 919-0351 | Business | North America |
| Akabis, Inc. | Customer Service | www.akabis.com customer.service@akabis.com (866) 312-1070 | Business | North America |
| Anveo Inc. | Anveo.com | http://www.anveo.com anveo.sales@anveo.com (215) 701-0680 | Both | Both |
| Aptela | Aptela Business VoIP Phone Service | www.aptela.com info@aptela.com (703) 386-1500 | Business | Both |
| AT&T | AT&T | www.att.com AT&T email contact (800) 248-3632 | Both | Both |

Table 1: Provider Directory Information

| Company Name | Service Name | Contact | Services (Consumer / Business) | Geographic Coverage (North America / International) |
|--|--|--|--------------------------------------|--|
| AVAD Technologies | Business Hosted VoIP Provider | http://www.avadtechnologies.com neal.gilbert@avadtechnologies.com (212) 2454064 | Business | North America |
| Bandwidth.com, Inc. | Phonebooth | http://www.phonebooth.com CustomerCare@phonebooth.com (855) 692-6684 | Business | North America |
| Broadcore | Hosted Unified Communicaitons | broadcore.com sales@broadcore.com (310) 921-7000 | Business | Both |
| Broadview Networks, Inc. | OfficeSuite | www.broadviewnet.com marketing@broadviewnet.com (800) 276-2384 | Business | North America |
| Broadvox | GO!VBX | http://www.broadvox.com info@broadvox.com (214) 303-9719 | Business | North America |
| Bullseye Telecom Inc. | Telecommunications | www.bullseyetelecom.com sales@bullseyetelecom.com (877) 438-2855 | Business | North America |
| Call Center Development Services | Centcom | www.ccds.ca info@ccds.ca (800) 921-2237 | Business | Both |
| CallTower Inc | Enterprise Unified Communications | www.calltower.com bbarnes@calltower.com (650) 520-2801 | Business | North America |
| CosmoCom | CosmoCom | www.cosmocom.com info@cosmocom.com (631) 940-4202 | Business | Both |
| Dialtel Inc. | Voice Broadcasting | http://www.dialtel.com erik@dialtel.com (774) 273-1355 | Business | Both |
| Fastmetrics, Inc. | Hosted VoIP & Unified Communications Solutions | http://www.fastmetrics.com sales@fastmetrics.com (800) 724-7100 | Business | Both |
| Five9 | Five9 Virtual Call Center Suite | www.Five9.com sales@five9.com (800) 553-8159 | Business | Both |
| FluentStream Technologies | FluentCloud | www.fluentcloud.com info@fluentstream.com (303) GO-CLOUD | Business | Both |

Table 1: Provider Directory Information

| Company Name | Service Name | Contact | Services (Consumer / Business) | Geographic Coverage (North America / International) |
|-----------------------------|--|--|--------------------------------------|--|
| Global Crossing | Communications as a Service (not official name of offer) | www.globalcrossing.com kate.rankin@globalcrossing.com (973) 937-0417 | Business | Both |
| Grasshopper | Virtual Phone Systems | http://grasshopper.com Support@grasshoppergroup.com (800) 820-8210x2 | Both | North America |
| Intellicomm Inc | Innoport | www.innoport.com sales@innoport.com (610) 731-0400 | Both | North America |
| IP5280 Communications | Business VoIP Services | www.ip5280.com john.scarborough@ip5280.com (303) 800-0000 | Business | Both |
| ipSBS Managed Services, LLC | HostMyCalls | http://HostMyCalls.com sales.info@hostmycalls.com (866) 242-6161 | Business | North America |
| Iristel | Iristel | www.iristel.ca sales@iristel.ca (416) 800-4747 | Both | Both |
| Junction Networks | OnSIP Hosted VoIP | http://www.onsip.com sales@junctionnetworks.com (800) 801-3381 | Business | North America |
| LightEdge Solutions | LightEdge Solutions | http://www.lightedge.com info@lightedge.com (877) 771-3343 | Business | North America |
| Orange Business Services | Orange Business Services | http://www.orange-business.com kathy.grashof@orange-ftgroup.com | Business | Both |
| Pac-West Telecomm, Inc. | Telastic | http://www.pacwest.com esymons@pacwest.com (510) 380-5977 | Both | Both |
| PanTerra Networks Inc. | WorldSmart | http://panterrannetworks.com info@panterrannetworks.com (800) 805.0558 | Business | Both |
| PBX Central Corporation | KBx Hosted PBX Business Phone Services | www.pbxcntral.com mark@pbxcntral.com (512) 744-1490 | Business | Both |
| Pingtone | Pingtone | www.pingtone.com sales@pingtone.com (877) 501-PING(7464) | Business | Both |

Table 1: Provider Directory Information

| Company Name | Service Name | Contact | Services (Consumer / Business) | Geographic Coverage (North America / International) |
|-------------------------------|--|--|--------------------------------------|--|
| PosTrack Technologies, Inc. | Communications as a Service | http://www.postrack.net telecom.sales@postrack.net (815) 768-2040 | Business | Both |
| Ringio | Ringio | http://www.ringio.com support@ringio.com (888) 727-5776 | Business | North America |
| Segway Communications | Segway Communications | www.segwaycommunications.com sales@segwaycommunications.com (877) 734-9292 | Both | Both |
| Star Telecom | SIP solutions for call centers (LD, Toll Free, DID, Routing, Recording, Reporting) | http://www.startelecom.ca sales@startelecom.ca (855) STAR-TEL | Business | Both |
| Telecentrex Communications | Hosted PBX | http://www.voipconsultant.com help@voipconsultant.com (888) 494-4681 | Business | North America |
| TelStar Hosted Services, Inc. | TelStar Hosted Services, Inc. | www.TelStarHosted.com sales@telstarhosted.com (877) 483-5782 | Both | Both |
| TLS.NET | TLS.NET | www.tls.net success@tls.net (812) 378-4100 | Business | North America |
| UniVoIP Inc. | Manged PBX Service Provider | WWW.univoip.com sales@univoip.com (310) 747-3232 | Business | Both |
| Versature Corp | Versature Hosted PBX | http://www.versature.com sales@versature.com (877) 498-3772 | Business | North America |
| Virtual PBX | Virtual PBX Complete | www.virtualpbx.com sales@virtualpbx.com (888) 825-0800 | Both | Both |
| Voice Carrier | Voice Carrier Office | www.voicecarrier.com rick@voicecarrier.com (650) 376-1204 | Both | North America |
| VoiceNEXT | PbxNEXT | www.voicenext.com support@voicenext.com (732) 653-5000 | Business | Both |
| Xebba | Xebba Virtual PBX and IVR | http://www.xebba.com support@xebba.com (866) 5582734 | Both | Both |



Overland Storage



Industry : Technology

The deciding factor was the robust feature set and cost savings Fonality provided.

- Greg Harvey

Director of IT

About the Customer

Based in San Diego, California. Overland Storage is the trusted global provider of effortless data management and data protection solutions across the data lifecycle.

Challenges:

- Move off multiple systems, including Nortel and ShoreTel, that required a site visit and fees any time a system change was required
- Provide receptionist with visibility to employee presence and status
- Provide call centers with the ability to extract reports on their own, providing insight into employee performance and key statistics
- Improve employee communications

The Solution:

Fonality's Call Center Edition, combined with Fonality's Heads Up Display, improved communications amongst their 47 employees. The company will save more than \$14,000 a year in system maintenance costs with the Fonality system.

HUD: A New Way to Communicate

HUD is a powerful application that connects the phone, desktop and organization by consolidating all communication into a single easy-to-use interface. Now, employees can manage calls, presence/status, queues, all directly from their desktop, with just the click of a mouse.

4. Survey Methodology

The information from the cloud/hosted communications providers was used to create the tables in the Sourcebook. The authors have not edited or changed any of the provider's survey responses. The accuracy of the data contained in this Sourcebook is solely the responsibility of the responding providers.

The survey provides material for understanding and appreciating the cloud/hosted communications market and providers. The survey was sent to 210 providers who promoted their communications services on their websites. A total of 60+ providers responded to the survey between late December 2010 and March 2011. The survey included 20 multi-part questions plus provider contact information.

The survey questionnaire can be found at [the Webtorials website](#).

The survey does not cover the cost of the services but covers:

- What services are provided--IVR, PBX, call center, UC (21 choices)
- The geographic coverage for the service (inside and outside the continental 48 states)
- Did the provider sell their own service (retail and wholesale) or were they a reseller?
- The customer size, 25, 100, 1000, 1000+ phones/seats
- Solution type--on premise, remote hosted, cloud based
- Network access technologies (Internet, MPLS....)
- Device support (IP phones, legacy phones.....)

5. Provider Descriptions

Service Descriptive Names

The names that providers use for their services seem to be all over the map. The confusion about the cloud/hosted based communications services starts with what the provider calls their service. As can be seen from the table below, some providers use more than one name for their service.

Here are the common names used by the responding providers:

| Descriptive Service Name | Response Percentage |
|------------------------------------|----------------------------|
| Hosted/Cloud VoIP | 65% |
| Hosted VoIP | 72% |
| Virtual PBX | 46% |
| Hosted/cloud call center | 46% |
| Communications as a Service (CaaS) | 52% |

Some providers used unique names to describe their services such as:

- Hosted Unified Communications
- Cloud-based software SBC
- Message Broadcasting/SMS Broadcasting
- Cloud-based Unified Communications as a Service (UCaaS)
- Hosted IVR
- Voice Broadcasting Services

Service Implementation Models

There are several possible business models for the cloud/hosted communications providers. Different business models may complicate some and maybe all of the issues that can arise when subscribing to a cloud/hosted service. Here are the business models now in place:

- A total cloud/hosted service where the provider owns the hardware, software, network and has the staff that implements and maintains the service.
- The cloud-based service can be a collection of dedicated or shared servers that run customer owned software, i.e. a private cloud. Amazon's EC2 platform is cloud based business service that already exists. Amazon Elastic Compute Cloud (Amazon EC2) is a web service that provides resizable compute capacity in the cloud. Here, the Service Level Agreement (SLA) covers the platforms and network but not the features and functions offered because the customer is responsible for the features and functions.

- A carrier or ISP uses a third party's communications service site to provide the service but bundles the network access and SLA into a total package.
- Another model is a communications software vendor operating on another provider's hardware, on a Platform as a Service (PaaS). The Amazon EC2 service is a candidate to support this model as well.
- A provider develops their own software and hosts the service on their site. The network access is usually through the Internet. The SLA covers the hosting site but not the network.
- The provider locates the system/solution on the enterprise premises, charges by the seat/phone but manages the system remotely. The enterprise becomes responsible for some of the business continuity capabilities as well as power and cooling costs.
- A reseller that owns nothing (no hardware, software or network) but resells cloud services for one or more, usually wholesale, providers.

The business model will have a great influence on the Service Level Agreements (SLA) and Acceptable Use Policies (AUP) that an enterprise will encounter. The stability of the service may be in jeopardy if the service provider business model is not successful. What if the cloud/hosted provider goes out of business? What if the provider decides to terminate some function and features? The enterprise should have a backup service plan in place in case any of these situations occurs.

Provider Performance Considerations

The Service Level Agreement (SLA) will be measured over a long period of time, possibly weeks. The SLA will be met when no one is using the service reporting successful SLA compliance. The SLA is most important when the call busy hour occurs. Experience with the SLAs of MPLS services is an example of the biased arrangements that clearly need to be renegotiated to satisfy the busy hour performance.

The demarcation point (where the SLAs start and ends) for accessing the service may be much further away than the enterprise expects. The distant demarcation point means that the provider is not responsible to meet the SLA at or near the customer premises or desktop. The network access is usually not included in the SLA.

Analyze the SLA and performance reports produced by the provider. Do they offer real insight into the usage? Are the reports demonstrating how to tailor the services to meet the enterprise's needs after the service is turned on? As more features and functions are introduced, the enterprise should be able to evaluate who uses what and how well so that only the features and functions of value continue.

6. Market Descriptions

Service Descriptions

There are a number of cloud/hosting services available, over 210 providers. Each has its own definition of cloud/hosted communications. Almost all of the services are accessed via the Internet, about 94%. Here are the types of cloud/hosted services available today:

- **Basic Telephony** - The features expected for small business and consumer phone service.
- **IP Telephony** - (IP PBX) The common features and functions found on a legacy PBX and newer IP PBXs are offered.
- **Unified Messaging** - A messaging service that includes a single storage and delivery of voice mail, e-mail, and fax messages.
- **Presence** - A system for collecting and managing an individual's status, ability communicate, and preferences for mode of communication.
- **Conferencing** - Voice/audio, video and web conferencing services are part of the category.
- **Call Center Support** - This would include individual or combined functions such as:
 - Auto Attendant
 - Automatic Call Distribution (ACD)
 - Interactive Voice Response (IVR)
 - Auto/predictive Dialing
- **Unified Communications** - A communications service that includes several of the following elements; voice, unified messaging, video, mobility, web/data collaboration, and presence.
- **HD Voice** - This service uses wideband/broadband IP phones to deliver very high quality voice/speech, much better than legacy phone voice quality.

The more unique functions and features that an enterprise requires, like vertical market features, the more likely they will not be found on a cloud/hosted service unless that service targets the enterprise's vertical market. There will always be functions that are common to most enterprises. These will be the candidates for cloud/hosted services that are of greatest interest to the enterprise.

The customer size supported by the providers varies considerably from 25 seats/phones to over 5000 seats/phones. The majority of providers covered the

range of 1 to 500 seats/phones. Some providers can support over 5000 seats/phones. The provider may include the phones in the service or the customer needs to provide the phones or the provider will mix and match customer and provider supported phones.

About 2/3 of the providers are not resellers of services. Most of the providers do not wholesale their services. The services are implemented at 2/3 of the providers sites, while 1/3 use cloud based sites. At least one provider places equipment on the customer's site to implement the service.

Some providers sell flexibility as part of their service, but contract language hinders and may eliminate the achievable flexibility. Enterprises want flexibility in there traffic volumes and the number of phones/seats. Many providers support the traffic changes well. Flexibility also includes changing the balance of cloud vs. enterprise operations, hardware and software usage.

How to Read the Tables

The following tables list all of the providers who responded to the survey. Not all of the entries in each column are consistent. The tables contain the provider's responses and have not been modified by the authors. Any blank spaces in the tables indicate that no answer was specified by the provider.

The definitions for the table headings are:

- **Provider** is the name of the providers company. Detailed contact information is in [Table 1](#) of this report.
- **Target Customer Size** ([available to paid service subscribers](#)) provides the targeted ranges of phones/seats that the provider supports per enterprise location.
- **Service Offering** specifies the provider's business position, does the provider sell only to enterprise (retail), wholesale to other providers or is reseller of another providers services.
- **Service Location** specifies where the service is implemented, at the customer site, in the cloud or at the provider's site.
- **Phones** specifies whether the customer provides the phones, the provider supplies the phones or as in mix and match, a combination of provider and customer phones is offered.

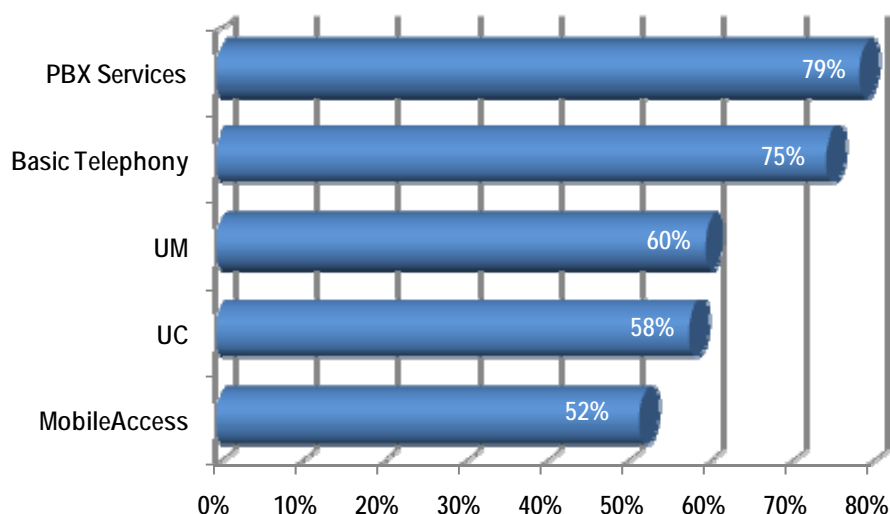
| Table 2: Service Descriptions | | | |
|----------------------------------|---------------------------|------------------|--------------------|
| Provider | Service Offerings | Service Location | Phones provided by |
| 8x8, Inc. | Retail | Cloud | Mix & Match |
| Abtech | Retail, Wholesale | Cloud | Mix & Match |
| Akabis, Inc. | Retail | | |
| Anveo Inc. | Retail | Cloud | Customer |
| Aptela | Retail, Wholesale | Provider site | Mix & Match |
| AT&T | Retail | | |
| AVAD Technologies | Retail | Provider site | Mix & Match |
| Broadcore | Retail | Provider site | Mix & Match |
| Broadview Networks, Inc. | Retail, Resale | Provider site | Mix & Match |
| Broadvox | Retail, Resale, Wholesale | Provider site | Mix & Match |
| Bullseye Telecom Inc. | Retail, Resale, Wholesale | Cloud | Mix & Match |
| Call Center Development Services | Retail, Resale | Provider site | Customer |
| CallTower Inc | Retail, Wholesale | Provider site | Mix & Match |
| CosmoCom | Retail, Wholesale | Cloud | Mix & Match |
| Dialtel Inc. | Retail, Wholesale | Provider site | Customer |
| Fastmetrics, Inc. | Retail | Customer Site | Mix & Match |
| Five9 | Retail | Provider site | Mix & Match |
| FluentStream Technologies | Retail | Cloud | Mix & Match |
| Fonality | Retail | Provider site | Provider |
| Global Crossing | Retail | Cloud | Customer |
| Grasshopper | Retail | Provider site | Provider |
| IP5280 Communications | Retail | Provider site | Mix & Match |
| ipSBS Managed Services, LLC | Retail | Provider site | Mix & Match |
| Iristel | Retail | Provider site | Mix & Match |

| Table 2: Service Descriptions | | | |
|-------------------------------|---------------------------|------------------|--------------------|
| Provider | Service Offerings | Service Location | Phones provided by |
| Junction Networks | Retail, Wholesale | Provider site | Customer |
| LightEdge Solutions | Retail, Resale, Wholesale | Provider site | Mix & Match |
| Masergy Communications Inc. | Retail, Resale, Wholesale | Provider site | Mix & Match |
| Orange Business Services | Retail, Resale | Cloud | Mix & Match |
| Pac-West Telecomm, Inc. | Retail, Wholesale | Cloud | Mix & Match |
| PanTerra Networks Inc. | Retail, Wholesale | Provider site | Customer |
| PBX Central Corporation | Retail, Resale, Wholesale | Provider site | Provider |
| Phonebooth.com | Retail | Cloud | Mix & Match |
| Pingtone | Retail, Wholesale | Provider site | Customer |
| PosTrack Technologies, Inc. | Retail, Wholesale | Cloud | Mix & Match |
| Ringio | Retail | Cloud | Mix & Match |
| Segway Communications | Retail, Wholesale | Provider site | Mix & Match |
| Star Telecom | Retail, Wholesale | Provider site | Customer |
| Telecentrex Communications | Retail, Resale | Provider site | Mix & Match |
| TelStar Hosted Services, Inc. | Retail | Provider site | Mix & Match |
| TLS.NET | Retail | Cloud | Mix & Match |
| UniVoIP Inc. | Retail, Resale | Provider site | Mix & Match |
| Versature Corp | Retail | Cloud | Mix & Match |
| Virtual PBX | Retail | Cloud | Mix & Match |
| Voice Carrier | Retail | Provider site | Mix & Match |
| VoiceNEXT | Retail, Resale | Provider site | Mix & Match |
| Xebba | Retail | Provider site | Customer |

7. Service Offerings

The information from the cloud/hosted communications providers was used to create the tables in the Sourcebook. The authors have not edited or changed any of the provider's survey responses. The accuracy of the data contained in this Sourcebook is solely the responsibility of the responding providers.

The survey found that 75% of the providers offered basic telephony services and 79% of the providers offered PBX services. Unified Messaging (UM) was offered by 60% of the providers, Unified Communications (UC) was offered by 58% of the providers with mobile access support at 52%. There were 16 other services defined in the survey.



Sample Provider Business Service Offerings

The more sophisticated enterprises will discover that nearly half of the providers are not yet ready with the UC, UM and mobile access features. This reduces the number of candidate service providers that can be considered by the enterprise for sophisticated features and functions like UC, UM and mobile access.

When it came to call center services, the responses were widely distributed, for example, only 19% offered Predictive Dialing. At the other extreme, 77% offered Auto Attendant services. When an enterprise looks for cloud/hosted call center services, there appears to be no consistent definition of what these call center services should include. A few of the provider call center features can be combined with non-call center features, but a total call center feature list is not available from most of the providers.

Feature and Function Considerations

When the enterprise is ready to outsource part or all of its communications feature and functions, the menu of services becomes important. The enterprise should:

- Match the features and functions already in use by the enterprise.
- Consolidate disparate functions offered by in house operations or that are outsourced to individual providers
- Look for the next level of features and functions that may be required by each business unit in the next two or three years.

The best possible list of features and functions would be an ala carte menu so that only those features and functions will be paid for by the enterprise. Unfortunately, providers package multiple features and functions, so the enterprise may have to subscribe to features and functions that are not desired. If the provider really wants the enterprise business, there may be room to negotiate the package of features and functions.

Not all users in the enterprise will need all the features and functions that the enterprise subscribes for its operation. There may be reasons that some of the users are not allowed to access certain features and function because of regulatory and/or compliance requirements. The enterprise should then not pay for them. Look for user specific menus rather than accepting a one size fits all solution.

How to Read the Tables

A total of 21 services were specified in the survey. The table provides details on 4 of them:

1. **Basic Telephony** = small business and consumer features
2. **PBX** = features found on an IP PBX
3. **HD voice** = High Definition voice quality
4. **UC** = Unified Communications

Information was gathered and will be [available to paid service subscribers](#) concerning:

1. **UM** = Unified Messaging
2. **Mobile support** = wireless access
3. **Voice/audio conferencing**
4. **Video conferencing**
5. **Call Center** services include:
 - Inbound call support
 - Outbound call support

- Interactive Voice Response (IVR)
 - Auto Attendant
 - Automatic Call Distribution (ACD)
 - Predictive Dialing
 - Call Recording
 - Call Reporting
6. **Web conferencing**
 7. **E-mail**
 8. **Fax mail and**
 9. **Instant Messaging (IM)**

A “Yes” in the field indicates that the provider offers this service. If the provider did not specify to the survey, the field is left blank. The entries in the fields are the provider responses to insure accuracy. None of these tables was extracted from the provider’s website to insure the accuracy of the information.

| Table 3: Service Offerings | | | | |
|----------------------------------|-----------------|-----|----------|-----|
| Company Name | Basic Telephony | PBX | HD voice | UC |
| 8x8, Inc. | Yes | Yes | Yes | Yes |
| Abtech | Yes | Yes | Yes | Yes |
| Anveo Inc. | Yes | Yes | Yes | Yes |
| Aptela | Yes | Yes | Yes | Yes |
| AVAD Technologies | Yes | Yes | Yes | |
| Broadcore | Yes | | Yes | Yes |
| Broadview Networks, Inc. | Yes | Yes | | |
| Broadvox | Yes | Yes | Yes | Yes |
| Bullseye Telecom Inc. | Yes | Yes | | |
| Call Center Development Services | | Yes | | Yes |
| CallTower Inc | | Yes | Yes | Yes |
| CosmoCom | | | | Yes |
| Fastmetrics, Inc. | Yes | Yes | Yes | Yes |
| FluentStream Technologies | Yes | Yes | Yes | Yes |
| Fonality | Yes | Yes | | Yes |
| Grasshopper | | Yes | | |

Table 3: Service Offerings

| Company Name | Basic Telephony | PBX | HD voice | UC |
|-------------------------------|-----------------|-----|----------|-----|
| Intellicomm Inc | | | | Yes |
| IP5280 Communications | Yes | Yes | Yes | Yes |
| ipSBS Managed Services, LLC | Yes | Yes | Yes | |
| Iristel | Yes | Yes | Yes | |
| Junction Networks | Yes | | Yes | Yes |
| LightEdge Solutions | Yes | | Yes | Yes |
| Masergy Communications Inc. | | Yes | Yes | Yes |
| Orange Business Services | Yes | Yes | Yes | Yes |
| Pac-West Telecomm, Inc. | Yes | Yes | | |
| PanTerra Networks Inc. | Yes | Yes | Yes | Yes |
| PBX Central Corporation | Yes | Yes | Yes | Yes |
| Phonebooth.com | Yes | Yes | Yes | |
| Pingtone | Yes | | Yes | Yes |
| PosTrack Technologies, Inc. | Yes | Yes | Yes | Yes |
| Ringio | Yes | Yes | | Yes |
| Segway Communications | Yes | Yes | | |
| Star Telecom | Yes | | | |
| Telecentrex Communications | Yes | Yes | Yes | |
| TelStar Hosted Services, Inc. | Yes | | | |
| TLS.NET | | Yes | Yes | Yes |
| UniVoIP Inc. | Yes | Yes | | |
| Versature Corp | Yes | Yes | Yes | Yes |
| Virtual PBX | | Yes | | |
| Voice Carrier | | Yes | Yes | |
| VoiceNEXT | | Yes | Yes | Yes |
| Xebba | | Yes | Yes | |

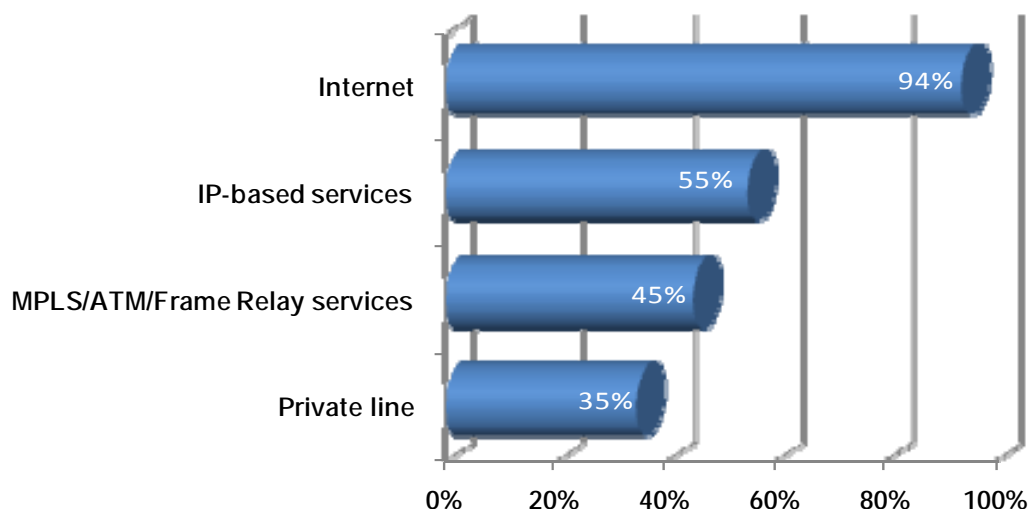
8. Network Access Technologies

Network access technologies are the means to connect to the cloud/hosted service. In most cases, the network access technology is the responsibility of the enterprise. This is commonly an ISP connection to the Internet. In some cases, the provider will include the network access technology, such as MPLS, as part of the provider's cloud/hosted service.

There are several considerations when selecting the service network access technology. If the access is through the Internet, then the Service Level Agreement (SLA) has the customer demarcation point at the provider's site, not the customer's location. Internet performance is not included in the SLA.

Secondly, some providers offer MPLS access to insure voice quality and the demarcation point moves to the customer site. Network performance is included in the SLA. Those using the Internet can not guarantee voice quality. MPLS service supports a high of Quality of Service (QoS) to ensure good voice quality.

Thirdly, private line access may be more expensive but insures voice quality. Security is an issue for all access technologies but can be solved through a VPN or MPLS or private line access.



Network Technology Access Distribution

The providers were given four choices for network access technology in the survey. As expected, 94% of the providers have access through the Internet. The survey found that there are other network technologies available for the service access, 35% through private lines, 44% through MPLS/ATM/Frame Relay and 56% have access through other IP based services (not the Internet).

9. IP and Legacy Device Support

Device Support

The phone is the primary device connecting to the cloud/hosted service. The survey asked the providers to specify what devices can be supported. All of the providers support some form of IP phone. The IP phone can be supplied by the providers or the customer. In some cases, the service only works with a specific manufacturer phones such as Cisco or Mitel IP phones. Other providers support a range of SIP based phones. In any case, the provider will probably require the enterprise LAN switches to support Power over Ethernet (PoE) for the IP phones or use a small transformer connected to an AC socket to power each IP phone.

Those Important Legacy Connections

It is almost always true that the non phone lines are and need to remain analog lines. This becomes an issue with the IP Telephony (IPT) gateway connecting to the cloud/hosted service that must support the non-phone devices. It is also annoying to many IT and communications managers that anticipate the retirement of all the analog lines and devices. So before attempting to eliminate the analog lines and gateways, consider the many cases where analog lines will continue operating for many years. The following list provides common examples of the continued use of analog lines that may have to be supported by the cloud/hosted service:

- Analog FAX machines that operate the T.30 standard
- Dial up modems mostly for PCs and possibly point of sale devices and credit card readers
- Alarm system connections
- Telemetry systems
- TDD (for the deaf)
- Elevator phones
- Secret lines for special conditions such as a whistle blower connection
- Analog phones in otherwise unoccupied buildings. There was a university that had 200 buildings with analog phones but only 100 buildings were continuously occupied.
- The janitor's closet
- Phones in common areas that have little physical security where it would be risk to deploy IP phones with Ethernet jacks.
- The guard shack that is 100s of feet from any building and can only be economically accessed on an analog line
- The phone line outside a building that is used to call the guards for off hours access should be an analog line to ensure security. Installing an Ethernet port there with an IP phone will be security vulnerability.
- Emergency phones as a lifeline to the PSTN use analog connections
- PSTN access for 911/E911 calls
- Warehouse phones where it is expensive to install Ethernet lines just for a phone

- Supervisory control and data acquisition connections that are designed for analog lines like telemetry devices
- Intercom lines
- Announcement lines

The analog line in the enterprise, government or educational institution is more common than even the average telecom person realizes. Enterprises invariably keep locating more analog lines in use that must stay as analog connections for the foreseeable future. Another advantage of analog lines is that some analog devices can be powered by the legacy PBX. This device powering over the analog line must be supported by the IPT gateway connecting to the service. If not, the device will not work. Therefore, the support of legacy devices may force some enterprises to continue connect to the PSTN. It is recommended:

- That an extensive inventory be made of all devices connected to the PBX and PSTN before issuing an RFP or entering into a contract for a cloud/hosted service.
- That the enterprise does NOT assume that any of these legacy devices will automatically disappear. They must be supported by the service.
- That the security department be consulted to determine what devices are currently connected or intended to connect to the service.
- That engineering, manufacturing and health groups be polled to see what they assume will be connectable to the service that may still operate on analog lines.

How to Read the Tables

A total of 11 IP and Legacy Device Support choices were part of the survey were specified in the survey. The table displays 4 of the support offerings. The column titles are defined as:

1. **IP phones (SIP)** that support a standard version of the Session Initiation Protocol and are offered by a range of manufacturers
2. **IP phones (Proprietary)** are IP phones that use a vendor specific protocol such as IP phones from Cisco and Mitel
3. **PC softphones** are PCs, laptops and other programmable computers supporting software supplied by the service provider
4. **Analog phone** means a standard legacy phone, not a digital phone

Information was gathered and will be [available to paid service subscribers](#) concerning:

1. **Analog Modem** means support for any device operation with an analog modem that works on a voice circuit
2. **ISDN BRI access** means that the service can support devices, usually digital phone that operate with the Basic Rate Interface (BRI) standard
3. **ISDN PRI access** means that the service can support devices, that operate with the Primary Rate Interface (PRI) standard
4. **Other** covers specific provider comments of multi-media devices, smartphone applications, channel banks, and analog Fax.

A "Yes" in the field indicates that the provider offers this service. If the provider did not specify to the survey, the field is left blank. The entries in the fields are the provider responses to insure accuracy. None of this table was extracted from the provider's website to insure the accuracy of this information.

| Table 4: IP and Legacy Device Support | | | | |
|---------------------------------------|-----------------------|---------------------------------------|---------------------|---------------------------|
| Company Name | IP-based phones (SIP) | IP-based phones (Proprietary formats) | PC-based softphones | Traditional analog phones |
| 8x8, Inc. | Yes | | Yes | Yes |
| Abtech | Yes | | Yes | Yes |
| Anveo Inc. | Yes | | Yes | |
| Aptela | Yes | | Yes | |
| AVAD Technologies | Yes | | Yes | |
| Broadcore | Yes | | Yes | Yes |
| Broadview Networks, Inc. | Yes | Yes | Yes | Yes |
| Broadvox | Yes | Yes | Yes | |
| Bullseye Telecom Inc. | Yes | | Yes | Yes |
| Call Center Development Services | Yes | | Yes | |
| CallTower Inc | Yes | Yes | Yes | Yes |
| CosmoCom | Yes | | Yes | Yes |
| Dialtel Inc. | Yes | | | Yes |
| Fastmetrics, Inc. | Yes | Yes | Yes | Yes |
| Five9 | Yes | | Yes | Yes |
| FluentStream Technologies | Yes | | Yes | Yes |
| Fonality | Yes | | Yes | |
| Global Crossing | Yes | | Yes | Yes |
| Grasshopper | Yes | | | |
| Intellicomm Inc | | | | Yes |
| IP5280 Communications | Yes | | Yes | |
| ipSBS Managed Services, LLC | Yes | Yes | Yes | Yes |
| Iristel | Yes | | Yes | Yes |

Table 4: IP and Legacy Device Support

| Company Name | IP-based phones (SIP) | IP-based phones (Proprietary formats) | PC-based softphones | Traditional analog phones |
|-------------------------------|--------------------------|--|------------------------|---------------------------------|
| Junction Networks | Yes | | Yes | |
| LightEdge Solutions | Yes | Yes | | |
| Masergy Communications Inc. | Yes | | Yes | Yes |
| Orange Business Services | Yes | Yes | Yes | Yes |
| Pac-West Telecomm, Inc. | Yes | | | |
| PanTerra Networks Inc. | Yes | | Yes | |
| PBX Central Corporation | Yes | | Yes | |
| Phonebooth.com | Yes | | Yes | |
| Pingtone | Yes | Yes | Yes | |
| PosTrack Technologies, Inc. | Yes | Yes | Yes | Yes |
| Ringio | Yes | | Yes | Yes |
| Segway Communications | Yes | Yes | Yes | |
| Star Telecom | Yes | Yes | Yes | Yes |
| Telecentrex Communications | Yes | | Yes | |
| TelStar Hosted Services, Inc. | Yes | | Yes | Yes |
| TLS.NET | Yes | | Yes | |
| Versature Corp | Yes | | Yes | |
| Virtual PBX | Yes | | Yes | Yes |
| Voice Carrier | Yes | | Yes | Yes |
| VoiceNEXT | Yes | | Yes | |
| Xebba | Yes | Yes | Yes | Yes |

About Orrick

Orrick, Herrington & Sutcliffe LLP (Orrick) is a global law firm with more than 1,100 lawyers in North America, Europe and Asia. The firm focuses on litigation, complex and novel finance and innovative corporate transactions. Orrick clients include Fortune 100 companies, major industrial and financial corporations, commercial and investment banks, high-growth companies, governmental entities, start-ups and individuals. The firm's 21 offices are located in Beijing, Berlin, Düsseldorf, Frankfurt, Hong Kong, London, Los Angeles, Milan, Moscow, New York, Orange County, Pacific Northwest, Paris, Rome, Sacramento, San Francisco, Shanghai, Silicon Valley, Taipei, Tokyo and Washington, D.C.

Client Challenge

Orrick was looking for a way to connect its collection of network services purchased locally at its various corporate locations and condense them into a single global network. They were working with a well-known Tier 1 service provider that was unable to deploy a seamless network into Asia and other European countries with the desired quality of service. As a result, the firm was forced to use various providers for international circuits. Orrick knew the industry had shifted to Multi Packet Label Switching (MPLS), but found that its Tier 1 provider was struggling to offer a true MPLS network service.

Not only was the technology out of date, but account service and billing was also fraught with chronic problems. Orrick's invoices were incorrect for the first year and a half with its previous service provider and, in turn, the firm was spending a significant amount of time dealing with billing issues. The law firm was seeking a reliable service provider with a front-to-back global MPLS network capable of supporting converged services with streamlined provisioning, excellent customer support and error-free invoices.

“Most service providers find it hard to credibly assemble a true MPLS network since they are still heavily invested in old technology. Also, new ownerships, acquisitions and mergers have resulted in a best-effort stitching and weaving of different networks. We found MASERGY's network to be the only pure global IP/MPLS network built from the ground up.”

—Patrick Tisdale,
Chief Information Officer, Orrick



MASERGY Solution

To compare available wide-area network service options, Orrick evaluated several providers including large global carriers. While MASERGY was not the largest or best known player in the mix, it became the clear leader on all evaluation points – including price. MASERGY was the most attractive choice when considering its seamless global MPLS network, network engineering expertise and superior customer support.

MASERGY implemented its Private IP solution with the Critical Data, Voice and Video Quality of Service (QoS) levels. Critical QoS was implemented to provide the highest priority data traffic for applications that required guaranteed bandwidth. Voice QoS was set up for voice traffic to be prioritized above all other traffic. Video QoS was implemented to ensure that Orrick's Telepresence and high definition (HD) video conferencing systems perform flawlessly.

The law firm also added MASERGY's Network Analyst service for in-depth visibility into application performance and real-time network monitoring and reporting capabilities.

Business Success

After MASERGY consolidated Orrick's global network, the law firm's overall network costs decreased by 15 to 20 percent.

MASERGY's guaranteed bandwidth and security has enabled efficient electronic communications including e-mail with large gigabit size attachments, Web meetings, data-intensive case document uploads and other client transactions across the law firm's internationally dispersed corporate and client locations.

Telepresence and HD video conferencing play an integral role in Orrick's internal and executive communication strategy. In the next six months, the firm plans on deploying more than 85 video conferencing endpoints with a mixture of Telepresence, HD, standard definition and desktop video conferencing systems over the MASERGY network. MASERGY's native IP/MPLS network will enable site-to-site guarantees of 100 percent packet delivery — in sequence — for flawless, life-like quality video communications.

Orrick's IT personnel use MASERGY's Network Analyst tool for monitoring network latency, traffic pattern and packet response. They find that the tool differentiates itself as the "best" in the industry and dives further than any other service providers' solution for end-point to end-point network analysis and diagnostics.

Since first deploying the MASERGY network, Orrick has almost doubled the number of its global corporate offices. The global law firm relies on MASERGY in determining best practices and providing analysis on network expansion and managing growth. Furthermore, Orrick benefits from improved service reliability, superior application performance and in-depth network monitoring. MASERGY's ability to deliver an enhanced customer experience is also demonstrated through its personalized customer support and simple and accurate invoices. Orrick appreciates MASERGY's dedicated account team that proactively initiates regular account reviews and periodically benchmarks individual circuits to determine best performance and pricing.

"MASERGY connected our entire global network, transforming a very complex process into a simple one. They were very flexible and delivered perfectly, even on short notice."

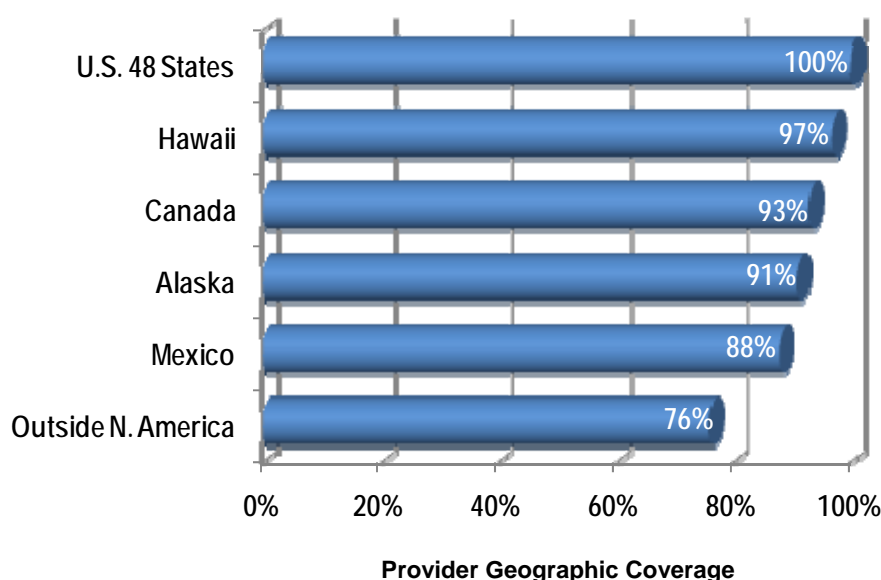
"When we discuss our use of MASERGY with leading voice, video and network technology companies, they always say, 'excellent choice, absolutely the best, especially when you want to deliver Telepresence, HD video or voice across your enterprise WAN.'"

"Being a smaller client of the larger service providers, we never got the focused, dedicated customer service that MASERGY delivers. We feel the love with MASERGY."

10. Geographic Coverage and Implications

The information from the cloud/hosted communications providers was used to create the tables in this part of the Sourcebook. The authors have not edited or changed any of the provider's survey responses. The accuracy of the data contained in this Sourcebook is solely the responsibility of the responding providers.

All the providers offered service in the continental 48 states. The geographic coverage outside of North America was specified in the survey as 12 different geographic territories. The international coverage varied considerably by provider. For example, one provider only supported one central European country, the U.S. and the Middle East.



As expected, the geographic coverage for the 48 continental states was 100%. Alaska coverage (91%) and Hawaii coverage (97%) were almost as complete as the 48 states. Canada was 93% covered while Mexico was covered by 88% of the providers. International coverage ranged from 70% to 76% but is not uniformly supported by all providers. Some providers focused on specific geographic regions, not worldwide coverage.

Why This is Important

The geographic coverage of a provider can be divided into at least four categories:

- Does the provider offer the service in the geographic area of interest?
- Does the service cover all of the geographic locations or only partially?
- Is premise equipment such as phones provided in that geographic area?
- Is on-site maintenance and support offered in that geographic area?

Since most providers locate their communications servers in a location other than the customer's, the geographic converge becomes relevant. Nearly all the providers offer

their services through Internet connections, so theoretically there is not geographic boundary to the service. However, since communications to off net users will require connections to other countries' PSTN networks, coverage can be limited by this restriction. Providers have to place some remote technology in other countries to implement these off network connections or pay international calling fees.

Survey questions

The first question, ***“Are your services available in North America”*** was answered yes by 100% of the respondents; however these responses need some qualifications. Alaska, Hawaii, Canada and Mexico are served by most respondents, but not all.

The second question ***“Please select the areas that you serve with each of the following functions. If you serve a subset of an area, please check “Partial Coverage” as well.”*** The responses were by U.S. region, Alaska, Hawaii, Canada and Mexico divided into four possible answers.

- VoIP/UC Hosted/Cloud Service
- Providing Premises Equipment (Phones etc.)
- On-Site Maintenance and Support
- Partial Coverage

The respondents all said they had cloud/hosted service in all of the 48 states. When it came to premises equipment, less than half the providers offered equipment e.g. phones in the 48 states. On-site maintenance and support was limited to 25% or less of the respondents. Alaska, Hawaii, Canada and Mexico had about the same converge for equipment, 25% or less. On-site support was even less for these four areas, generally less than 13%. No respondent had a partial coverage in the 48 states. Partial coverage does exist for Alaska, Hawaii, Canada and Mexico.

Complete information with a detailed matrix of each coverage type (VoIP/UC Hosted/Cloud Service, Providing Premises Equipment, and On-Site Maintenance and Support) for each of eight geographic areas within the continental US is available from [Webtorials / Delphi Consulting Services Hosted and Cloud-Based VoIP and Unified Communications Services.](#)

The third question was ***“Do you offer international services?”*** Roughly 60% have service coverage outside North America.

As with US-based coverage, the next question for these companies was ***“Please select the areas that you serve with each of the following functions. If you serve a subset of an area, please check “Partial Coverage” as well.”*** This question pertained to areas beyond North America (U.S., Canada and Mexico). Twelve international geographic areas are covered by the question. Again, the responses were divided into four possible answers.

- VoIP/UC Hosted/Cloud Service
- Providing Premises Equipment e.g. Phones etc.
- On-Site Maintenance and Support
- Partial Coverage

As with the US-based services, complete information with a detailed matrix of each coverage type (VoIP/UC Hosted/Cloud Service, Providing Premises Equipment, and On-Site Maintenance and Support) for each of twelve geographic areas outside North America is available from [Webtorials / Delphi Consulting Services Hosted and Cloud-Based VoIP and Unified Communications Services.](#)

Geographic Coverage considerations

1. Get detailed information on the North American geographic coverage. If you are outside the continental 48 states, such as Alaska, Hawaii and U.S. territories, geographic coverage may be limited or nonexistent. The same is true for Canada and Mexico. Do not assume that those locations outside the 48 states have full coverage. The coverage may be limited to only some metropolitan areas.
2. Get detailed information about international (outside North America) geographic coverage. Do not expect that those locations outside of North America to have full coverage. The coverage may be limited to only some metropolitan areas. Many providers focus on certain international locations but have no services covering the entire world.
3. Enquire about what equipment will be provided. Do you need to buy the phones or can they be included in the usage fees and supported by the provider?
4. If phones are not provided, are there specific vendors and products that the enterprise must buy, or are the phone choices at the enterprise's discretion?
5. Weigh the choice of provider supplied phones versus enterprise provided phones. IP phones are constantly being improved. The IP phone technology life may only be three years and then they become obsolete. Newer phones offer extended features and functions. Buying the phone may require phone replacement in three years, a much shorter time than anticipated. It may be cheaper in the long run to have the phones included in the service fee and periodically updated by the provider.
6. If the enterprise buys the phones and wants to change providers, the old phones may not work with the new provider.

How to Read the Tables

The geographic coverage has been summarized in 4 regions or nations.

- **North America** includes Alaska, Hawaii, Canada & Mexico
- **Central/South America** includes the Caribbean.
- **Europe / Eurasia / Middle East** includes the U.K., Western, Central, Eastern Europe and Russia
- **Asia** includes APAC, Australia, New Zealand, India & China
- X indicates that the responder has either full or partial coverage in that region.
- Complete information on coverage and areas not included in these regions will be available from [Webtorials / Delphi Consulting Services Hosted and Cloud-Based VoIP and Unified Communications Services.](#)

Table 5: Geographic Coverage

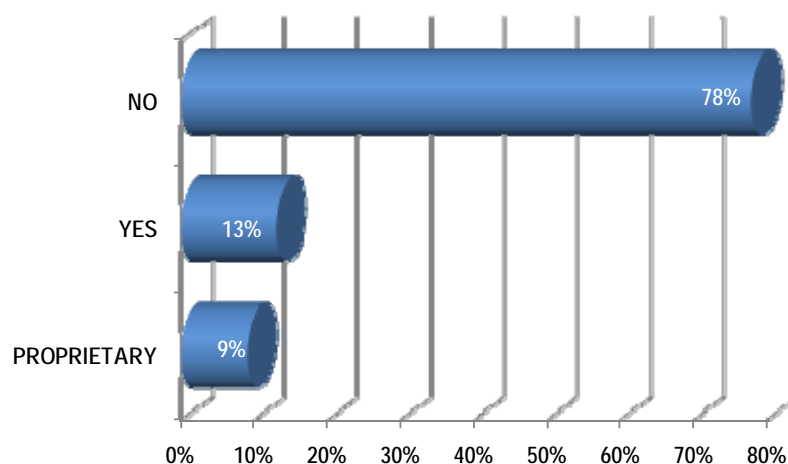
| Company Name | North America | Central / South America / Caribbean | Europe / Eurasia / Middle East | Asia / Australia & New Zealand | Africa |
|----------------------------------|---------------|-------------------------------------|--------------------------------|--------------------------------|--------|
| 8x8, Inc. | Yes | Yes | Yes | Yes | Yes |
| Abtech | Yes | | | | |
| Akabis, Inc. | Yes | | | | |
| Anveo Inc. | Yes | Yes | Yes | Yes | Yes |
| Aptela | Yes | Yes | Yes | | Yes |
| AT&T | Yes | Yes | Yes | Yes | Yes |
| AVAD Technologies | Yes | | | | |
| Broadcore | Yes | Yes | Yes | Yes | Yes |
| Broadview Networks, Inc. | Yes | | | | |
| Broadvox | Yes | | | | |
| Bullseye Telecom Inc. | Yes | | | | |
| Call Center Development Services | Yes | Yes | Yes | Yes | |
| CallTower Inc | Yes | | | | |
| CosmoCom | Yes | | | Yes | |
| Dialtel Inc. | Yes | Yes | Yes | Yes | Yes |
| Fastmetrics, Inc. | Yes | Yes | | | |
| Five9 | Yes | Yes | Yes | Yes | Yes |
| FluentStream Technologies | Yes | Yes | | | |
| Fonality | Yes | Yes | Yes | Yes | Yes |
| Global Crossing | Yes | Yes | Yes | Yes | |
| Grasshopper | Yes | | | | |
| Intellicomm Inc | Yes | | | | |
| IP5280 Communications | Yes | Yes | Yes | | Yes |
| ipSBS Managed Services, LLC | Yes | | | | |
| Iristel | Yes | | | | |
| Junction Networks | Yes | | | | |

Table 5: Geographic Coverage

| Company Name | North America | Central / South America / Caribbean | Europe / Eurasia / Middle East | Asia / Australia & New Zealand | Africa |
|-------------------------------|---------------|-------------------------------------|--------------------------------|--------------------------------|--------|
| LightEdge Solutions | Yes | | | | |
| Masergy Communications Inc. | Yes | Yes | Yes | Yes | Yes |
| Orange Business Services | Yes | Yes | Yes | Yes | Yes |
| Pac-West Telecomm, Inc. | Yes | Yes | Yes | Yes | Yes |
| PanTerra Networks Inc. | Yes | Yes | Yes | Yes | Yes |
| PBX Central Corporation | Yes | Yes | Yes | | Yes |
| Phonebooth.com | Yes | | | | |
| Pingtone | Yes | Yes | Yes | Yes | Yes |
| PosTrack Technologies, Inc. | Yes | Yes | Yes | | Yes |
| Ringio | Yes | | | | |
| Segway Communications | Yes | Yes | Yes | Yes | |
| Star Telecom | Yes | Yes | Yes | Yes | |
| Telecentrex Communications | Yes | | | | |
| TelStar Hosted Services, Inc. | Yes | Yes | Yes | Yes | Yes |
| TLS.NET | Yes | | | | |
| UniVoIP Inc. | Yes | | | Yes | |
| Versature Corp | Canada | | | | |
| Virtual PBX | Yes | Yes | Yes | Yes | |
| Voice Carrier | Yes | | | | |
| VoiceNEXT | Yes | Yes | Yes | Yes | |
| Xebba | Yes | Yes | | | |

11. Market Implications

Mergers, Acquisitions and Consolidations



Percentage of Respondents That Experienced a Merger, Acquisition or Consolidation

2010 saw a number of mergers, acquisitions and consolidations in this market. It appears that these business actions were directed towards creating larger and stronger providers. Nearly 13% experienced a merger, acquisition or consolidation. 78% did not change while 9% considered this to be proprietary information. There are still many small providers in this market, so it is very probable that the mergers and acquisitions will continue. A market served by 210 providers is probably not sustainable. Expect more mergers and acquisitions and possibly some bankrupt providers.

The Enterprise Communications Plans

In February of 2010, members of Avaya's user group were invited to participate in a survey about business communications requirements and investments. The results were published in April 2010 in the report, "2010 Business Communications Drivers; Integration, Optimization, and Cost Reduction Drive Investments in Business Communications, A Special Report by the Webtorials Analyst Division". The report demonstrates that enterprises are very interested in integrating multiple forms of communications.

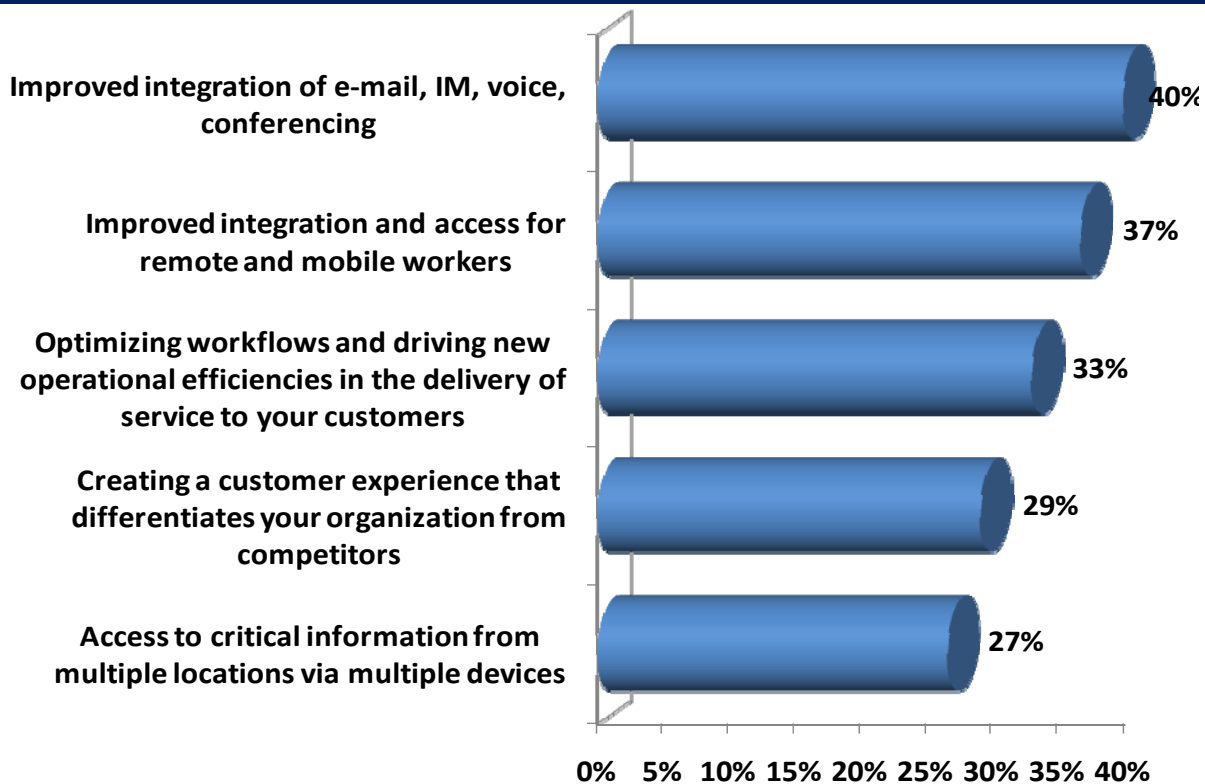
The enterprise can accomplish this goal through premises based solutions. However, the integration of so many communications forms does require expertise that many enterprises do not have or the enterprise has to hire expensive IT employees or pay for considerable training to gain the necessary expertise. This is where cloud/hosted based communications services can reduce the integration complexity and deliver the multiple forms of communications to the enterprise's office, remote and mobile locations.

Roughly 82% of the more than 700 survey respondents were located in the United States, with another 9% in Canada. Respondents in the healthcare/pharmaceutical, higher education, government, and financial industries comprised the largest number of respondents (51%, collectively). Users from manufacturing, insurance, telecommunications, and other industries were also represented in single-digit percentages each.

The key findings of this analysis of the enterprise plans are:

- Enterprises are most interested in integrating and optimizing communications technologies and methods.
- Enterprises plan to make new investments in IP Telephony (IPT) and Unified Communications (UC) to meet their integration goals.
- The desire to integrate communications and provide support for mobile employees continues to drive interest in UC.
- Investments in Contact Centers are focused on agent productivity and the enablement of IP and/or SIP based solutions.

Business Requirements



Please select the TOP THREE business communication requirements that users in your company want today.

Chart from "2010 Business Communications Drivers; Integration, Optimization, and Cost Reduction Drive Investments in Business Communications" at webtorials.com

The primary business requirement, as shown above, is for improved integration of e-mail, Instant Messaging (IM) voice and conferencing was the most common goal at 40% of the respondents. Integrating mobile and remote workers came in second at 37%. Workflow optimization was the next goal at 33%. Improving the customer experience came in at 29% while critical information access through multiple devices was 27%.

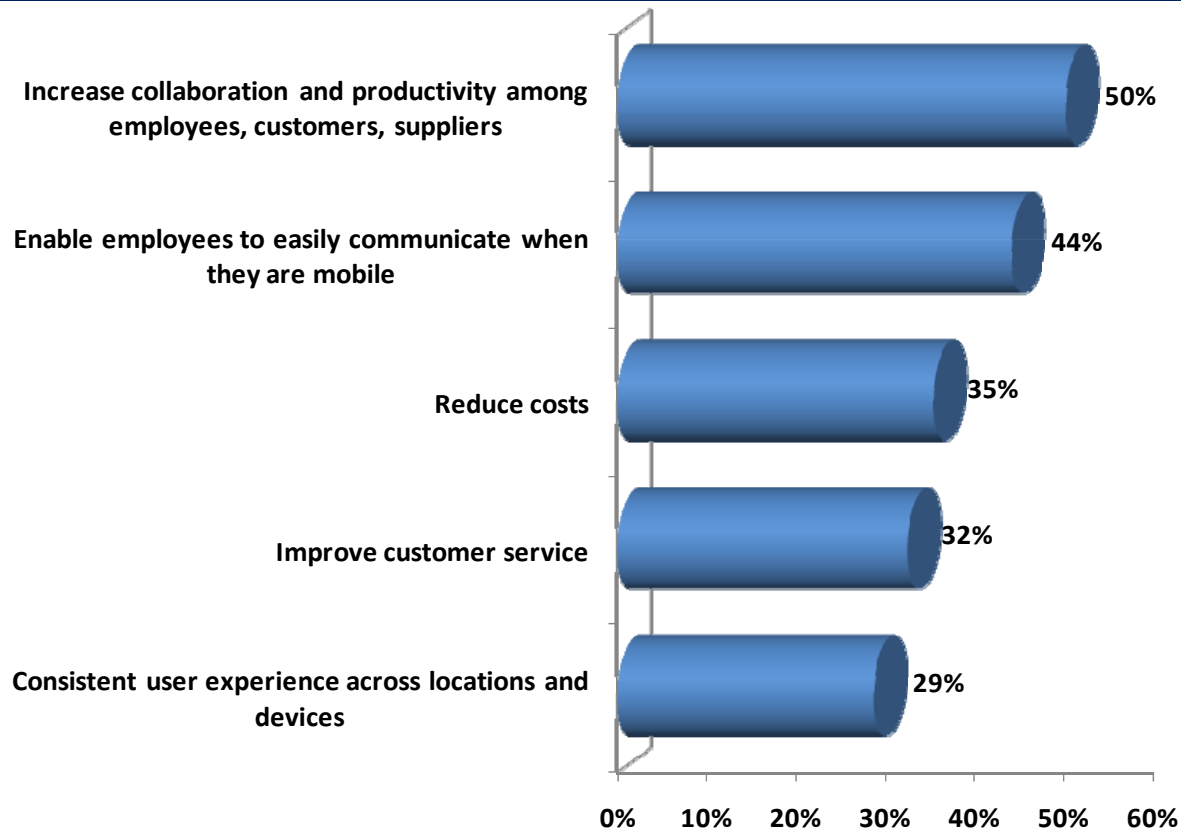
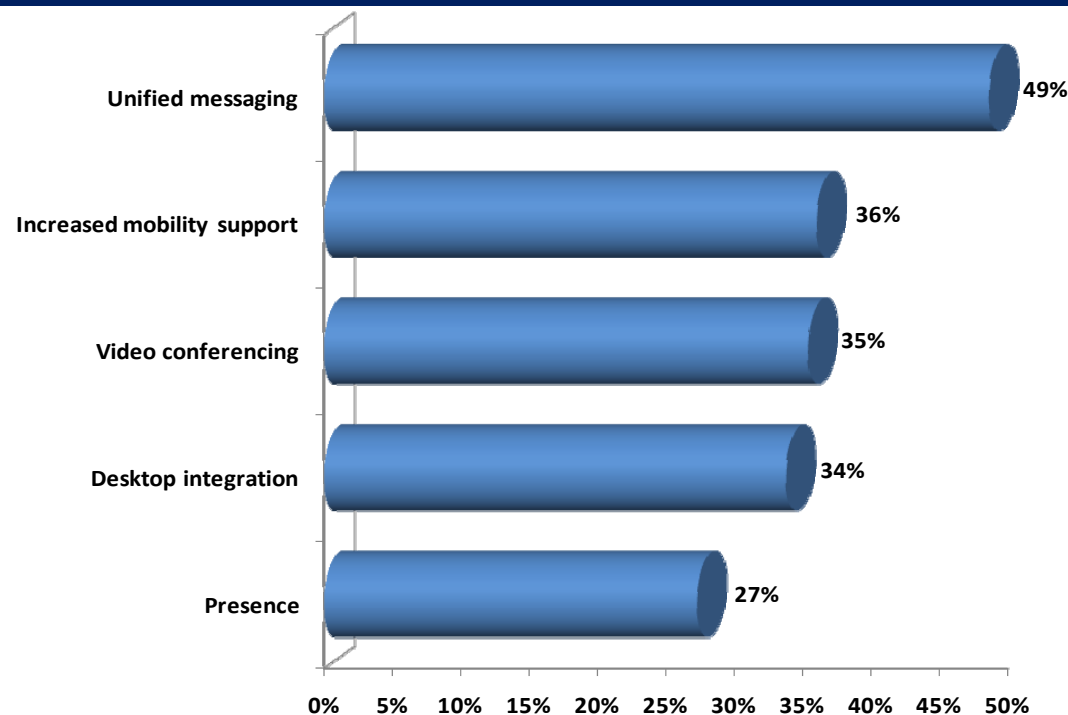
UC Deployment Reasons***What are the TOP THREE reasons for your company's deploying UC?***

Chart from "2010 Business Communications Drivers; Integration, Optimization, and Cost Reduction Drive Investments in Business Communications" at webtorials.com

As can be seen in the chart above, there several reasons for moving to Unified Communications. Notice that cost is not the top priority. It is third with 35% of the survey respondents selecting this choice. Increased collaboration at 50% and mobile communications at 44% were higher priorities. Improved customer service was fourth at 32% and consistent user experience across all locations was fifth at 29%. All of these goals can be met with a premises based system. However, the delivery of these goals would be much easier and faster to deliver and require a much lower capital investment if the enterprise selects a cloud/hosted solution.

UC Investments Over the Next 12 Months

In which aspects of Unified Communication do you plan to make a significant investment in the next 12 months?

Chart from "2010 Business Communications Drivers; Integration, Optimization, and Cost Reduction Drive Investments in Business Communications" at webtorials.com

The five choices for Unified Communications investment by the enterprise demonstrates that the cloud/hosted based services discussed in part II of the report, "[Service Offerings, Network Access and Device Support](#)" can fulfill these investments with operating expense (OpEx) dollars instead of capital expense (CapEx) dollars. Money is still hard to borrow in today's financial market. Using the enterprise capital for investments other than IT is very attractive. Subscribing to cloud/hosted services becomes very attractive to the enterprise avoiding the need for capital dollars.

SMB Communications Plans

In December 2010 and January 2011, the Webtorials database and other individuals who had demonstrated an interest in Cloud-based IP Telephony solutions were presented with a set of statements and asked to indicate their level of agreement with the statements. The report, "SMBs: Communications ROI Trumps Technology, 2011 SMB Communications Plans and Priorities State-of-the-Market Report" was published January 2011.

SMBs are caught between minimizing and controlling their cost of operations and improving their technological advantage within their companies as well as for their customers. SMBs are aware of cloud-based technologies and know that they can improve their operations. They know they need improvement in their internal and external communication methods and the technologies in use.

Minimizing the impact on their total cost of operations, maximizing their working capital and cash flow, and significantly improving their overall operations (particularly in the area of communications) are the factors that drive the business decisions of these SMBs. Any proposal to upgrade their technological advantage will be met with open arms if appropriately presented with the proper background and education.

The report posed several questions asking for the opinion of the SMBs. The most important question from this study is "Please indicate the extent to which you agree with each of the following statements...Answer options: Strongly agree, Agree, Disagree, Don't know or N/A; "Don't know or N/A" answers were excluded from percentages shown". The answers are shown in the chart below.

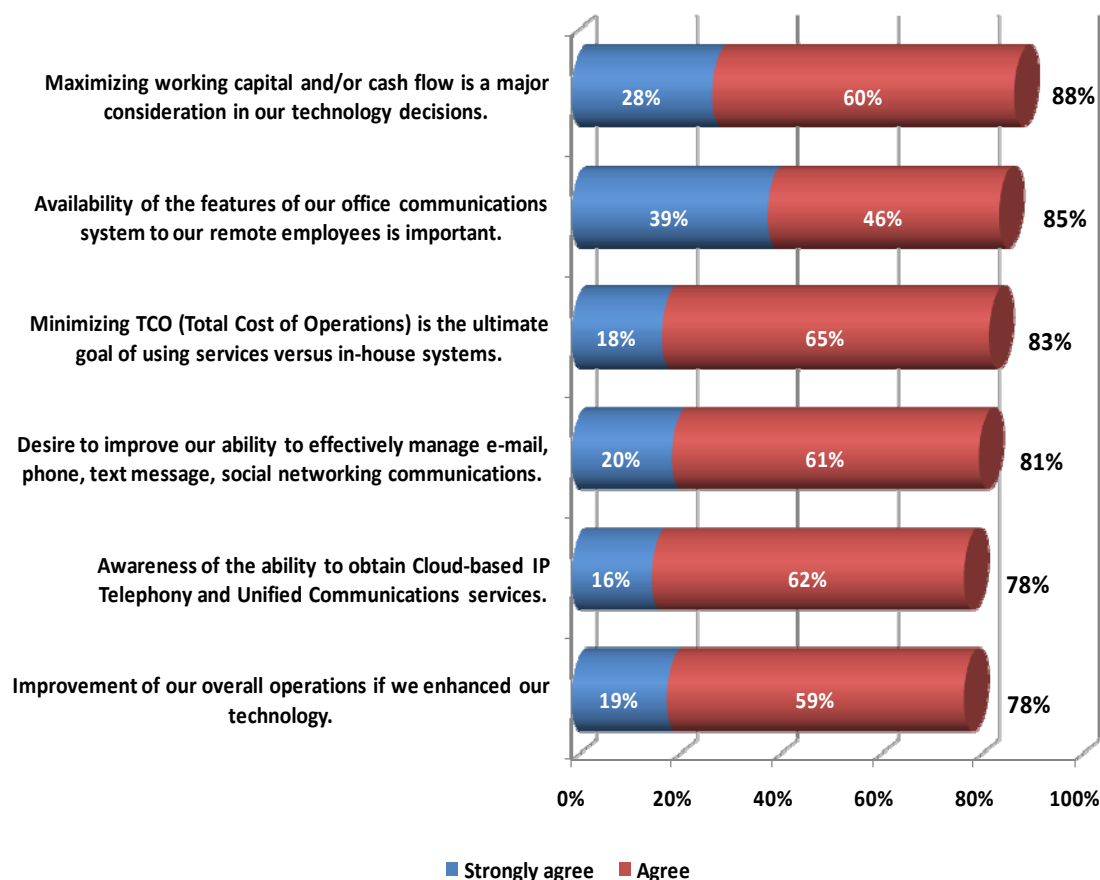


Chart from "SMBs: Communications ROI Trumps Technology, 2011 SMB Communications Plans and Priorities State-of-the-Market Report" at webtorials.com

The key findings from this SMB study demonstrate that:

- Financial considerations to ensure the maximum performance at the lowest price are the primary drivers for SMBs when compared to enterprises.
- Mobility and Unified Communications are recognized as key technologies very much the same as the enterprise.
- Most respondents see their current solutions as being "good," but they also would like to improve their capabilities. With a small or non-existent IT staff, the complexity of moving UC and conferencing solutions pushes the SMB towards a cloud/hosted solution.
- There is a very high amount of interest in cloud-based solutions.

Moving to cloud-based technologies is of great interest to the SMB because the move could provide

:

- From a technical perspective:
 - more efficient methods of operations
 - leading edge technology to enable their employees / their company to be / remain on the cutting edge
 - enhanced communications: internally, remote employees and their customers
- And from a financial perspective:
 - hard cost savings in terms of asset investments
 - soft cost savings in terms of increased employee productivity

The second report, ***“Unified Communications and Cloud-Based Services Yield Exponential Savings For SMBs, A Webtorials State-of-the-Market Report”*** was published February 2011. This report shows that two related IT capabilities, Unified Communications and cloud-based services bring tremendous power to companies of all sizes. However, many of the strongest advantages of implementing UC have eluded SMBs because of the cost of having an IT staff to support this effort. Bringing the two together - implementing Unified Communications as a cloud-based service - provides a perfect solution.

The most important goal for the SMB is to produce as much efficiency for its staff; that is to increase productivity. The report asked ***“How much time per day (in minutes) do you think the average “Knowledge Worker” spends each day on each of the following tasks?”***

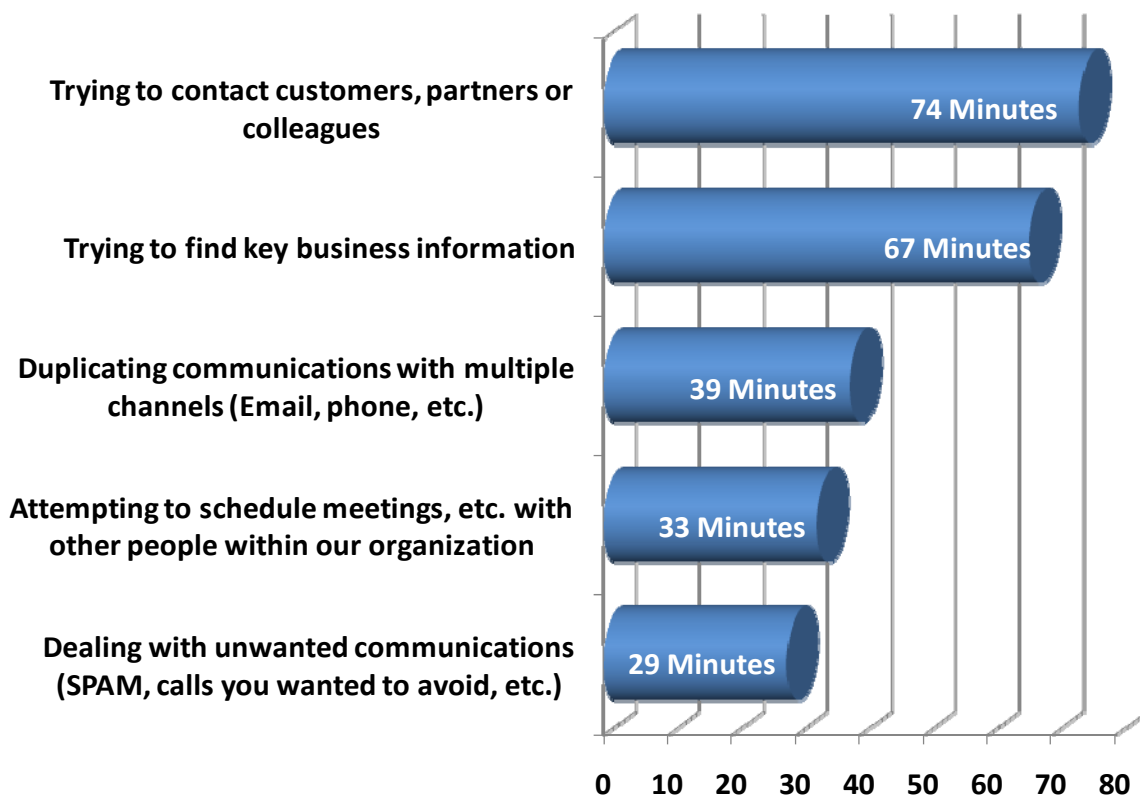


Chart from “ Unified Communications and Cloud-Based Services Yield Exponential Savings For SMBs, A Webtorials State-of-the-Market Report” at webtorials.com

The annual recovered time-value for a theoretical company with 50 knowledge workers could be as much as \$942,500 by adopting the cloud/hosted approach. Providers of these services can demonstrate a rapid ROI both by minimizing capital costs and by optimizing the efforts of hard-to-find IT support staff allowing them to concentrate on business-specific needs. The bottom line is that support of UC for the SMB moves from being a major IT undertaking to be a commodity solution.

The enterprise and SMB should be careful not to make assumptions about what is offered with cloud-based communications services. Although many providers offer similar services, there are differences that should be considered when selecting a provider.

Full database access is available to subscribers to [Webtorials / Delphi Consulting Services Hosted and Cloud-Based VoIP and Unified Communications Services.](#)

About Gary Audin

Gary Audin Delphi-inc@att.net has more than 40 years of computer, communications and security consulting and implementation experience. He has planned designed, specified, implemented and operated data, LAN and telephone networks. These have included local area, national and international networks as well as VoIP and IP convergent networks in the U.S., Canada, Europe, Australia, Caribbean and Asia. He has advised domestic and international venture capital and investment bankers in communications, VoIP, and microprocessor technologies.

Gary Audin's many articles can be found on www.webtorials.com, www.telecomreseller.com and www.acuta.org. He writes a weekly blog on communications subjects that can be found at www.nojitter.com and publishes technical tips at www.SearchTelecom.com, www.SearchNetworks.com and www.SearchUnifiedCommunications.com.

About the Webtorials® Editorial/Analyst Division

The Webtorials® Editorial/Analyst Division, a joint venture of industry veterans Steven Taylor and Jim Metzler, is devoted to performing in-depth analysis and research in focused areas such as Metro Ethernet and MPLS, as well as in areas that cross the traditional functional boundaries of IT, such as Unified Communications and Application Delivery. The Editorial/Analyst Division's focus is on providing actionable insight through custom research with a forward looking viewpoint. Through reports that examine industry dynamics from both a demand and a supply perspective, the firm educates the marketplace both on emerging trends and the role that IT products, services and processes play in responding to those trends.

For more information and for additional Webtorials® Editorial/Analyst Division products, please contact Jim Metzler at jim@webtorials.com or Steven Taylor at taylor@webtorials.com.

This report was prepared by Gary Audin of Delphi, Inc., Steven Taylor, Co-founder, and Leslie Barteaux, Senior Analyst / Editor of Webtorials.

Published by

Webtorials

**Editorial/Analyst
Division**

www.Webtorials.com

Division Cofounders:

Jim Metzler

jim@webtorials.com

Steven Taylor

taylor@webtorials.com

Professional Opinions Disclaimer

All information presented and opinions expressed in this publication represent the current opinions of the author(s) based on professional judgment and best available information at the time of the presentation. Consequently, the information is subject to change, and no liability for advice presented is assumed. Ultimate responsibility for choice of appropriate solutions remains with the reader.

Copyright © 2011, Webtorials and Delphi, Inc.

For editorial and sponsorship information, contact Jim Metzler or Steven Taylor. The Webtorials Editorial/Analyst Division is an analyst and consulting joint venture of Steven Taylor and Jim Metzler.