

THE FUTURE IS CALLING:

What's Next for Telephony and Unified Communications?

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INTRODUCTION



As advances in computing, networking, the internet and smartphones have enabled new communication technologies, voice services have taken a back seat.

Telephone service was the very first collaboration and real-time information technology, permeating business environments as early as the 1900s. As telephony technology matured, it took hold in every part of the business, and for more than a hundred years, telephones and voice services were integral to doing business. We quickly began to expect that telephony would always be up and available. Nothing was (or is) as disconcerting as picking up a phone without a dial tone or having calls drop mid-stream.

As advances in computing, networking, the internet and smartphones have enabled new communication technologies, voice services have taken a back seat. More and more compute processing has shifted to the cloud, making telephony less and less of a preferred method of communication in business. Many IT organizations have diverted their focus and investment dollars away from maintaining and modernizing the voice environment.

What does this mean for business and IT leaders who are making budget, staffing and strategy decisions today? This ISG white paper explores the changing nature of telephony and its role in the future of unified communications and collaboration (UCC).



Defining the Current Market

Today's telephony services are a subset of services collectively referred to as unified communications and collaboration (UCC). Typically, UCC encompasses telephony, voicemail, audio and video conferencing, online collaboration, instant messaging (IM) and presence. In the past, these telephony services were delivered through various applications and dedicated equipment and services, such as CENTREX lines, TDM or VoIP Private Branch Exchanges (PBXs), IM apps, audio bridges and video equipment. From the time IP port shipment eclipsed traditional ports in 2008, traditional port volumes have continued to drop year over year and only exist today for needed maintenance of legacy systems.

Enterprise UCC plans can range in maturity. Some companies are just beginning to migrate to VoIP/SIP while others have deployed global or enterprise-wide UCC systems across all communication channels. Most companies that have made this shift over the last 10 years have done so to address end-of-life legacy telephony deployments, facilitate the move to SIP, reduce annual voice costs, and hedge against the uncertainty of the long-term financial viability of traditional telephony market players. But many are uncertain about their UCC strategy. This is the UCC challenge companies face today: transitional-only telephony solutions and core technical solutions are changing while operations, management and the groups that support them aren't evolving at the same pace.

Cloud-based UCC, new mobile capabilities, the consumerization of IT and a flood of new market entrants are disrupting the oligopoly that legacy carriers and providers have enjoyed in the market to date. Large enterprises now are asking, "Should I go with Cisco or Microsoft? Jabber or Skype?" Enterprises have begun implementing multiple products in their environment unsure about how best to integrate them.

Are these product-oriented questions even the right ones to ask? Or should enterprises be asking what is the right mix of mobility and UCC? Do we need to invest in on-site equipment? Who are the right cloud providers? Do we have the correct organization and support model? If communication technologies are consolidating and becoming more automated, are we reaping the benefits?

Enterprises should consider the following three trends that are reshaping today's telephony and communication market:

- 1.** A cloud-first mentality is disrupting traditional application and infrastructure services.
- 2.** The "workplace of the future" must accommodate a more-mobile and remote workforce.
- 3.** Communication solutions are being integrated into applications, e.g. UCC-as-a-Service (UCCaaS).

The Future is Calling

Cloud-first Mentality

Today, most enterprises have a directive, in one form or another, to buy rather than build. In the past, this led to traditional, managed or hosted outsourcing solutions. But the success of “Anything as a Service” (XaaS) offerings has created a “cloud first” approach for enterprises seeking a simplified IT environment, lowered costs and increased speed to market. The growth and success of cloud-based apps, such as Salesforce and Office 365, and Infrastructure-as-a-Service (IaaS) offerings, such as Azure and Amazon Web Services (AWS), has been accompanied by a similar gain in momentum and market share of UCCaaS.

The cloud-first mentality has shifted work previously performed on dedicated, localized hardware, like traditional routers and firewalls, to virtualized or service-based offerings, such as software-defined wide area networking (SD-WAN), network function virtualization (NFV) and cloud-based firewalls, remote access and storage solutions. As solutions mature, even the most risk-averse IT organizations are considering moving workloads to the cloud, and once-untouchable local services like telephony and other real-time communications are following suit.

In fact, UCCaaS has reenergized and disrupted a staid telephony market. Initial resistance that came from the perceived need of having local resources and the “God-given right to a dial tone” have been mitigated by the fact that UCCaaS solutions offer greater convenience, functionality and comfort level with cloud resources and cellphones. Similarly, the underground success of Skype, the popularity of Facetime and the ubiquity of internet and compute platforms serving end consumers have proven that voice can be run from the cloud and offer far greater scalability. Enterprises are now following end consumers and embracing the concept.

Workplace of the Future

The rise of the smartphone and tablet, the growth of unlimited data plans and the dependency on remote and mobile workforces has impacted today's enterprises in many ways, with two main impacts on how employees communicate. First, it has put tools that once were reserved for big enterprises into the hands of consumers. Email, messaging, document scanning, presence and audio, web and video conferencing are now at the disposal of anyone, anywhere, anytime with communication taking place via cell phones, Skype and Facetime. As workers have become adept at these tools and as workloads have shifted to these devices, enterprises have reduced their spending on fixed investments like facilities, offices, employee benefits and telephony infrastructure, such as office phones and local PBXs.



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Second, the consumerization of communication tools like Skype, Facebook and Twitter has shattered the notion of business-class services. Users have demonstrated that, when they are provided communication tools as part of solutions they love, they will learn to use them without the support of enterprise IT organizations and will use them for purposes that make them more productive, both professionally and personally. When issues arise, they find a solution on their own via self-help channels – or they lower their expectations. Consumers are exceedingly tolerant of poor cell phone voice quality or network drops, for example, showing their reduced need for business-class services and SLAs. Additionally, as communication channels proliferate, each individual channel becomes less critical, pushing traditional telephony services farther down in priority on the list of commonly used communication tools.



Capturing and taking advantage of the spoken word has become a new business imperative, and enterprises must determine how their UCC platforms support these evolving business needs.

When social media and other communication applications exploded, enterprise IT organizations initially were protective of the services they provided; after all, the enterprise still required security and reliability. Then IT experienced other problems concerning location awareness for E911 services, dial plans and e-discovery, which employees were slow to adopt. The gap between consumer-grade and business-grade services was evident, and the business found more value in business-grade services than internet-based, consumer offerings and were happy paying business-class prices. As cloud services have become mainstream, enterprises now question the business-class price and increasingly are shifting their WAN bandwidth business-class services like MPLS to best-effort services like broadband.

Integration of Communication Tools

The rise of internet-based calling platforms in the consumer space, such as Skype, Facetime and Google Hangouts, has brought IP-based voice and video to the masses. Many applications now offer integrated voice and video capabilities, click-to-call features on websites are secondary to chat sessions as a method for contact, and voicemail transcription has eliminated the need for people to listen to voice data streams. Leveraging voice as a method of input into a predominantly digital world, Siri, Alexa, Cortana and many other digital assistants now handle millions of requests. Where do these advancements in technology lead?

The power of speech-to-text transcription has been somewhat of a Holy Grail for the past 20-30 years, promising to eliminate typing forever. Though the technology never gained acceptance in business for the originally expected tasks, recent advances and a new approach have precipitated a blossoming of new opportunities. Contextual recognition and the deep power of cloud computing have created a massive volume of data, while continual advancements in processing power have armed digital assistants with thousands of new skills.



As machine learning and natural language processing continue to improve – understanding and acting on tone and emotion in addition to words – new applications increasingly are using spoken data streams to determine selling opportunities. Beneath their pleasant voices and sunny dispositions, digital assistants can turn voice commands into a valuable form of data. Capturing and taking advantage of the spoken word has become a new business imperative, and enterprises must determine how their UCC platforms support these evolving business needs.

Creating a UCC Plan for Tomorrow

What can an IT leader do to keep pace with business today? The following four key steps will help establish a path forward.



All communication modernization initiatives should begin with taking stock of the existing environment.

1. Discover. Many organizations are overwhelmed by the effort required to maintain service and hardware inventory, understand the capabilities, skills and agreements of their service partners and stay up to date on what the market has to offer. Unfortunately, the pace of change and the number of areas requiring attention leave organizations confused and uncertain about the reality of their current state. All communication modernization initiatives should begin with taking stock of the existing environment. This includes answering the following questions:

- What are your current telephony costs?
- What are your existing capabilities?
- When did or will legacy platforms sunset?
- What service improvements do you need?
- What are your key organizational objectives for mobile, unified communications and telephony?
- What are the business risks and growth opportunities?
- What the operational risks of relying on old, unsupported platforms?
- What are the negative impacts to budgets caused by using assets depreciated well past their end of life?
- What savings and reinvestment opportunities will help fund UCCaaS transformation?
- Is there a valid business case for upgrading UCC or moving to the cloud?



- 2. Assess.** As the organization gathers data to answer these questions, it should begin the self-examination phase. Though many of the questions may not yet have answers, avoiding them only further delays the inevitable. By forcing these questions out in the open, you begin valuable discussions and can embark sooner on your transformation journey.

 - What will your workforce look like in the next 3 to 5 years?
 - Is your IT and greater organization ready to enable enterprise collaboration at scale?
 - Do you have the right service delivery organization, model and support partner(s)?
 - Are BYOD and mobility policies aligned to your demand and your transformation plans?
 - At what point will automation and other benefits kick in?
 - Do you have the architecture and infrastructure to support UCCaaS?
- 3. Design.** With fruitful discussions behind you, the next step is connecting the dots between what is possible and what can become reality. Is your strategy valid, supported and realistic? By designing a strategic roadmap and engaging the right partners in the industry, the vision for the future materializes. Here are the steps to follow:

 - Identify strategic objectives for your UCC program.
 - Develop a roadmap.
 - Establish checkpoints to report progress in adoption or course correction.
 - Identify how you will develop required capabilities and skills, including partnerships and ecosystem design that can support both legacy platforms and digital solutions.
 - Understand implementation needs, including resources, responsibilities and timing.
 - Leverage saved costs to upgrade the UCC plan to match strategic goals.
- 4. Transform.** After you have completed planning, there's only one thing left to do: make change happen.

 - Establish pilots to validate implementation potential and employee, client or partner adoption.
 - Design governance mechanisms for new initiatives.
 - Create scalable resourcing capabilities.



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Conclusion

Each enterprise has unique business challenges that affect how it adopts solutions and how it invests in and sources its IT capabilities. IT leaders must grapple with what their competitors are doing and how they compare to the market. These concerns are driven by fears that decisions made today might not match what others are doing, ultimately leaving them with investments and a plan that have limited value.

The time is now to engage internal partners to educate and collaborate on new opportunities. At the same time, seek outside perspectives to round out your strategy and overcome barriers. Change is always challenging; sometimes it's easier to fight fires or settle for the service provider's vision instead of working toward your own. But the innovators – those that can truly reinvent themselves – embrace the planning and creativity required to harness emerging technologies. By assessing your telephony policies and norms, engaging executives and thought leaders, finding the right partners and reinvesting savings, the change you make today just may take you to an entirely new place tomorrow.

ABOUT THE AUTHORS

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Emmanuel "Manny" Moss brings more than 25 years of experience managing global IT organizations and complex, multimillion dollar projects. He is a strategic IT leader distinguished by his passion for innovation and a desire to deliver solutions that address the toughest of business challenges. Manny has advised CIO, CTOs and other key IT leaders through the many phases of the sourcing lifecycle, including conducting IT-wide service delivery assessments; developing operating and governance models; developing and executing on sourcing strategies; managing transitions, acquisitions, transformations and organizational change; and managing providers, contracts and services. Manny has worked across diverse engagements covering the financial, healthcare, manufacturing, retail and food service industries.

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