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Magic Quadrant for Corporate Telephony

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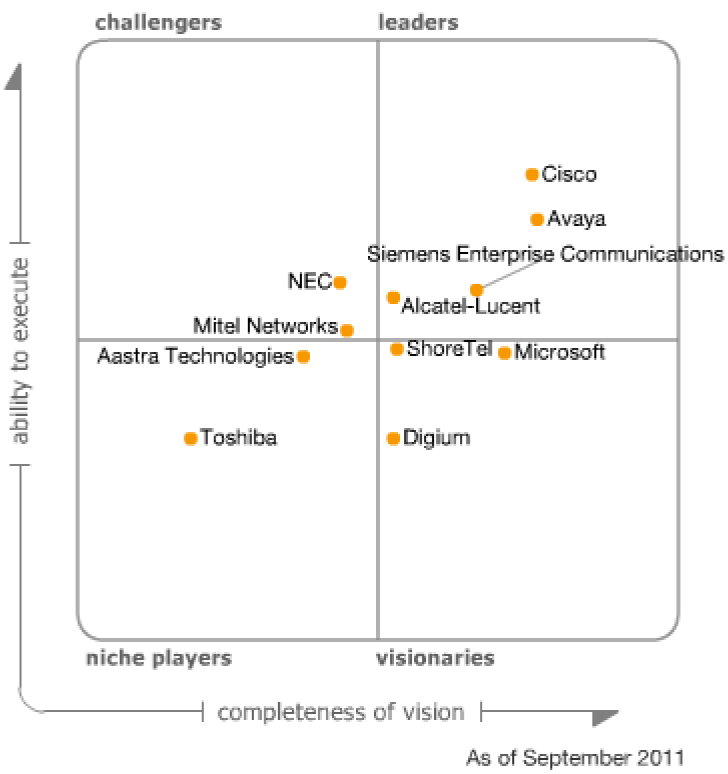
The key challenge users have been facing in 2011 is how to holistically satisfy voice and unified communications requirements for different groups of users, while managing costs. It becomes even more challenging when considering future corporate requirements.

What You Need to Know

Companies are increasingly focusing their strategies and acquisition decisions around unified communications and collaboration (UCC) technology; it is supplanting the historic domain of corporate telephony (see "Key Issues for Voice Applications, 2011" and "Key Issues for Unified Communications, 2011"). This shift presents IT planners with new user needs and technological integration challenges, especially as telephony applications become more mobile, and as knowledge workers increase their reliance on conferencing, video, IM and collaboration tools to fulfill group tasks. Organizations will continue to invest in Internet Protocol (IP) telephony platforms after having mapped out telephony's role in a clear unified communications (UC) strategy. As users' communication habits evolve, infrastructure and operations (I&O) leaders should consider new telephony and UC vendor relationships, as well as the use of managed services, outsourcing, hosted and cloud-based solutions. Employment of IP-PBXs will vary according to current investment, maturity of an organization's network infrastructure and incumbent vendor strategy.

Magic Quadrant

Figure 1. Magic Quadrant for Corporate Telephony



Source: Gartner (September 2011)

Market Overview

The telephony market recovery that started toward the end of 2010 has continued into 2011 (see "Market Share Snapshot: IP Telephony, Worldwide, 2011"). Following a 17% decline from 2008 to 2009 that mirrored the global economic downturn, shipments rebounded by 10% in 2010 (see "How to Choose a Corporate Telephony Vendor in a Turbulent Market"). However, Gartner projects that the compound annual growth rate (CAGR) for shipment will be 3.9% from 2011 through 2015. Incumbent vendors had advocated a strategy of "migrate at your own pace," but that is no longer valid. The risk of using aging legacy platforms that are beyond their useful life or end-of-support dates increases.

Some of the key technology trends in corporate telephony are:

- Microsoft launched Lync in November 2010 with some important developments that enable it to provide more-comprehensive solutions for voice in place of initial IP-PBX platforms deployed before 2008. While Microsoft has yet to energize its sales and channel partners to sell Lync, there has been significant interest (as evidenced by Gartner client inquiries) as an alternative to the IP-PBX platform.

- Session management within a telephony platform supports policies for routing sessions between network endpoints across multiple communications platforms. This elevates the role of the corporate telephony platform, and provides managers with alternatives for creating a homogeneous voice platform that can interoperate with other communications across the business. For example, most telephony players have launched a video capability within their portfolios or in partnership with independent players. Polycom and LifeSize have been quoted extensively as partners for high-definition video. Developing the voice-based telephony platforms to support video to the desktop and collaboration is possibly the last opportunity for many manufacturers to reverse the declining value of their enterprise IP-PBX packages. However, the value proposition of their holistic platforms needs to be better articulated.
- As the topic of virtualized telephony servers becomes increasingly popular within organizations, most vendors are investing to meet this need (see "Communication Server Virtualization"), while also focusing on users' objectives to reduce server and operations costs.
- With vendors increasing the bundling of communications capabilities to include not only voice, but also capabilities such as presence, IM, conferencing and mobility, organizations need to have a UC strategy in advance of buying into communication bundles. While offers may look attractive and are often appropriate for some users, the added cost of software subscription means buyers will likely be overpaying for features that are only being used by a minority of users (see "Using Roles to Facilitate Unified Communications Planning").

The Telephony Market Today

During 2010, Gartner witnessed two major trends: (1) aggressive discounting between 50% to 65% for corporate telephony systems that began in 2009 and carried over into 2010, especially for large global telephony deals; and (2) the bundling of individual telephony/UC functions into a single license. The first trend enforces the need for buyers to undertake competitive tenders using the RFP process, while also being more strategic about vendor selection (see "How to Develop an RFP for Unified Communications"). The second trend, bundling, combines valuable components around core telephony, such as presence services, unified messaging, mobility and softphone clients, into an aggregated license that will cost less than the total for individual licenses (see "Best Practice: Having a 'Big Picture' View of IP Telephony Will Give the Buyer More Control" [Note: This document has been archived; some of its content may not reflect current conditions.]).

With users becoming more mobile, organizations are interested in twinning incoming corporate telephony calls at the desktop with mobile devices (see "Critical Capabilities for Corporate Telephony" [Note: This document has been archived; some of its content may not reflect current conditions.]). As enterprises' buying power with mobile operators is strengthening, more organizations are able to negotiate on-net rates that enable lower-cost or flat-rate calling between mobile users and their enterprise networks. This increases the demand for solutions that integrate the mobile phone more tightly into the corporate telephony solution, and greater demand for integrating employees' preferred smartphones. Furthermore, the smartphone user interface is making it easier to use advanced calling features, and more vendors are including mobile capabilities as part of a license bundle.

The Future of Telephony Vendors

The enterprise voice market includes the provisioning of holistic voice communications for all wired and wireless users. Typically, this will include multiple sites in separate locations, and often in different countries. Architectures include distributed on-premises solutions, as well as centralized, virtualized and hosted platforms, but they are essentially dedicated for use by a single organization.

To satisfy these requirements, voice services are increasingly becoming Session Initiation Protocol (SIP)-based and part of a multichannel UCC strategy that is enabling IT planners to satisfy new user needs and overcome technological integration challenges. Some technology providers may not meet all your organization's requirements, as they refine their strategies for profitability and sustainability. Evaluate telephony vendors' ability to support one or more of the following future directions and capabilities:

- Supports real-time voice, video and conferencing capabilities across the enterprise network, integrated with collaboration capabilities, such as IM, email and desktop sharing. Migrating between different communication channels should be seamless for users and offer a lower total cost of ownership (TCO) for the IT group than managing separate communication channels.
- Demonstrates the value of session management and control, and supports policies for the ways that sessions are established between network endpoints across multiple technology platforms and managed for quality and cost controls. This elevates the role of the corporate communication platform to that of network and session manager, and is an alternative option to creating a homogeneous voice platform integrated with multiple communication channels across the business. Evaluate vendors with this approach for their ability to offer enhanced routing capabilities, extending contact center technologies as a value-added component of communication beyond the customer service center.
- Offers an open telephony platform that supports integrations and partnerships with conferencing and collaboration applications from disparate vendors. Vendor solutions should focus on managing voice across wired and wireless endpoints.
- Enables system integration with, and support for, competitive UC products to complement and supplement their telephony solutions. Increasingly, this will need to be a global capability to support knowledge worker groups across diverse geographies.
- Provides a scalable hosted alternative that supports capabilities for service providers to offer communications-as-a-service (CaaS) solutions. This will benefit from an operating expense cost model, but will be different from the multitenancy solutions (unified CaaS [UCaaS]) provided by carrier-grade vendors, because it will be more customizable. It will not likely match the cost points of the carrier-grade solutions, but will be targeted at large businesses. In contrast, most current carrier UCaaS offers focus on small or midsize business (SMB) requirements.
- Includes established network and system management tools that leverage the efficiencies and opportunities for cost savings afforded by IP technology, such as managing voice and data communications through a common Web-based user interface; remote provisioning of new extension users; and performing moves, adds and changes without the need to deploy technicians.

Market Definition/Description

Because voice is a key component of a UC strategy, and may be sourced in increasingly different ways, this Magic Quadrant focuses on technology vendors that design, manufacture and distribute a combination of hardware and/or software products to provide telephony solutions that satisfy stand-alone voice requirements of users, while enabling IT planners to meet broader UC requirements by expanding communications capabilities from the existing platform. Their architectures include distributed on-premises solutions, as well as hosted platforms, but they are essentially dedicated for use by a single company.

The market is evolving from proprietary hardware to the use of standards-based hardware and software purposefully designed to support the next generation of communications. However, vendors' strategies focus heavily on protecting the differentiation of their respective product portfolios to lock out competitors. Companies can use IP telephony to deliver business benefits across the organization, while consolidating disparate technologies around a common technology, solution provider, or selection of providers and partners. To meet the demands of this corporate telephony market, successful vendors offer scalable solutions, using technologies that leverage Internet-based architectures and protocols, such as SIP, but provide the necessary levels of resiliency, functionality and integration into IT applications, with the voice quality demanded by users.

Inclusion and Exclusion Criteria

To be included in this Magic Quadrant, technology vendors had to:

- Demonstrate a telephony application that provides enterprisewide call routing and management for more than 1,000 enterprise voice users, including front-office switchboard operations across multiple wired and wireless networks.
- Have a solution that includes the management of legacy telephony environments, including media gateways, the connection of IP with circuit-switched-based networks, and functions such as call admission control, survivability, codec management, echo cancellation and access to emergency services and agencies.
- Show evidence of sales, marketing and operational support for corporate organizations, consistently around the globe. Vendors with stronger capabilities in a smaller number of regions qualify for consideration, but their limited market reach impedes their ability to execute for many Gartner clients with multinational operations.
- Show evidence of a quantifiable significant market share in large organizations, specifically information, as shown in Gartner's published market statistics.
- Demonstrate the ability to generate significant interest and inquiries from Gartner client segments in the telephony market.

Added

There were no vendors added to the Magic Quadrant this year.

Dropped

HP was dropped this year because HP no longer sells new VCX systems (which HP had acquired from 3Com) and so does not meet the inclusion criteria.

Evaluation Criteria

Ability to Execute

The core corporate telephony market is mature. All the vendor products reviewed in this Magic Quadrant are capable of offering satisfactory solutions. As a result, most planners who want to acquire a new telephony platform have to make the difficult choice of: (1) remaining with existing vendor solutions to extend and preserve their investments; (2) consolidating their investments with their broader telephony infrastructure investments to simplify integration and vendor relationships; or (3) considering the best solution to ensure they have the optimal environment. Therefore, it's important for an organization to prioritize which features, functions and users are most important. This research provides guidance for planners who are responsible for updating or replacing a telephony system.

Gartner analysts evaluate corporate telephony solution vendors based on the breadth, quality and overall maturity of their applications, processes, tools and procedures that enhance individual, group and enterprise communications. Ultimately, these vendors are judged on their ability and success in capitalizing on their vision:

- **Product/Service:** Core products providing telephony capabilities, provided by vendors that compete in and serve the large-enterprise market segment. This includes current product capabilities, as defined in the market definition, as well as the direction in UC.
- **Overall Viability (Business Unit, Financial, Strategy and Organization):** Includes an assessment of the organization's overall financial health, as well as the financial and practical success of the business unit, especially under current market conditions. Also included is the potential of the business unit to continue to invest in the product, offer the product and advance the state of the art in the company's broader portfolio of products.
- **Sales Execution/Pricing:** The vendor and channel capabilities in all presales activities and the operational structure that supports them. This includes deal management, value selling, pricing and negotiation, presales support, and the overall effectiveness of the sales channel, direct and indirect.
- **Market Responsiveness and Track Record:** The ability to respond to current market conditions and the disruptive influences of UC. It assesses how a vendor might change direction or modify its portfolio to achieve competitive success, as opportunities develop, competitors act, customer needs evolve and market dynamics change. This criterion also considers the vendor's history of market responsiveness, as tracked in our market share and sizing research.
- **Marketing Execution:** The clarity, quality, creativity and efficacy of marketing programs designed to deliver the organization's message to influence all markets, promote the brand and business, increase product awareness, and establish a positive identification with the product, the vendor and the channel in the minds of buyers. This mind share can be driven by a combination of publicity, promotions, thought leadership, word of mouth and sales activities, as well as Gartner's inquiry process.
- **Customer Experience:** Sales and support relationships, products and programs that enable customers to be successful with the products evaluated. This includes the availability of technical and account support,

and the number of channels through which this is available. Also included are customer support programs (and the quality thereof), and the availability of user groups and SLAs. Gartner's feedback from clients through the inquiry process is included in our analysis.

- **Operations:** The ability of the organization to meet its goals and commitments, especially in the current climate. Factors include the quality of the organizational structure, especially global operations, skills, experiences, programs, systems and other vehicles that enable the vendor to operate effectively and efficiently on an ongoing basis (see Table 1).

Table 1. Ability to Execute Evaluation Criteria

Evaluation Criteria	Weighting
Product/Service	high
Overall Viability (Business Unit, Financial, Strategy, Organization)	high
Sales Execution/Pricing	standard
Market Responsiveness and Track Record	standard
Marketing Execution	high
Customer Experience	high
Operations	high

Source: Gartner (September 2011)

Completeness of Vision

Gartner analysts evaluate telephony solution providers based on their ability to convincingly articulate logical statements about current and future market directions, innovations, customer needs and competitive forces, and how well these map to Gartner's overall understanding of the marketplace. Ultimately, these providers are rated on their understanding of how market forces can be exploited to create opportunities for providers and their clients:

- **Market Understanding:** We evaluated vendors for their understanding of how customer needs are changing (both for users and the IT group responsible for managing telephony). It was especially important to see how vendors proposed to complement, or compete with, UC collaboration solutions.
- **Marketing Strategy:** A clear, differentiated set of messages for telephony and enhanced communications consistently delivered by executives and senior employees, and promoted through websites, advertising, customer programs and positioning statements.
- **Sales Strategy:** The strategy for selling telephony products that use an appropriate and profitable balance of direct and indirect sales, marketing, service and communication affiliates that extend the scope and depth of

market reach to selective markets. The understanding of the shift toward value selling was especially important.

- **Product Strategy:** The vendor's approach to telephony product development and delivery, with road maps for consolidation, where necessary. Important factors here are the migration to software, support for SIP and the ability to build scalable solutions consistent with the needs of target markets.
- **Business Model:** The logic of the vendor's underlying business proposition for the direction of the communications market.
- **Vertical/Industry Strategy:** Some vendors articulate a specialization for vertical markets, by leveraging intellectual capital, technology, or an alignment with a sister or parent company. The telephony solution provider's strategy to direct resources, skills and offerings to meet the specific needs of individual market segments, especially in the current climate, where the propensity to spend varies among segments.
- **Innovation:** The IP telephony market has reached maturity, and vendors need to demonstrate the innovation to capture market share and grow in associated markets, with a combination of technology and services to grow revenue beyond the market average.
- **Geographic Strategy:** The telephony market has historically been fragmented, with most players receiving income from their traditional home market. The requirements for many of Gartner's end-user clients are global. A vendor should demonstrate how it directs resources, skills and product offerings to meet the needs of international clients, directly or through channels, to market to the needs of Gartner's clients (see Table 2).

Table 2. Completeness of Vision Evaluation Criteria

Evaluation Criteria	Weighting
Market Understanding	high
Marketing Strategy	high
Sales Strategy	standard
Offering (Product) Strategy	high
Business Model	standard
Vertical/Industry Strategy	standard
Innovation	standard
Geographic Strategy	high

Source: Gartner (September 2011)

Leaders

Leaders are high-viability vendors with broad portfolios, significant market shares, broad geographic coverage, a clear vision of how telephony needs will evolve and a proven track record of delivering telephony solutions. They are well-positioned with their current product portfolio and likely to continue delivering leading products. Leaders do not necessarily offer a best-of-breed solution for every customer requirement. However, overall, their products are strong and often have some exceptional capabilities. Additionally, these vendors provide solutions that present relatively low risk.

Challengers

Challengers are vendors with strong market capabilities and good solutions for specific markets. However, overall, their products lack the breadth and depth of those in the Leaders quadrant. Challengers do not always communicate a clear vision of how the telephony market is evolving, and they are often less innovative or advanced than the Leaders. Vendors in this quadrant often have excellent telephony functionality, but lack brand awareness in the market.

Visionaries

Visionaries demonstrate a clear understanding of the telephony market and provide key innovations that point to the market's future. However, these vendors may be relatively new to the telephony market with very good potential to grow, while in the process of expanding their regional and global sales and support capabilities.

Niche Players

The vendors in this quadrant offer telephony solutions that focus on a segment or segments of the market, or a subset of telephony functionality. Customers aligned with the focus of a niche solution provider may find its offerings to be a good match for their limited needs. These solution providers often offer strong products for particular geographical or vertical market subsets, but may have some weaknesses in one or more important areas.

Vendor Strengths and Cautions

Aastra Technologies

To address the needs of large business, Aastra is consolidating its core voice portfolio around two key platforms: the Aastra 5000, which is strong in France, and the MX-One for global markets, with strength primarily in Europe and South America, as well as Australia, India and China. The MX-One is available to new customers, as well as customers with older Ericsson MD110 systems. Aastra also serves the U.S. market with Clearspan, an enterprise version of the BroadSoft platform that many service providers use in their central offices. The launch of the BluStar brand for video and endpoints will help consolidate a common look and feel for the different portfolios.

Both the Aastra 5000 and MX-One platforms achieve good scale, and are RFP contenders in their respective markets for existing and new customers, and where Aastra has strong support.

Strengths

- Aastra has competitive, scalable voice product portfolios, and is able to offer organizations a low TCO for enterprise telephony.
- The market downturn has been an opportunity for Aastra to leverage its strong cost of ownership position and grow its market share faster than its rival European competitors.
- Aastra is a well-run business with a strong focus on profitability and expense management. This enterprise-focused business leverages its consistent good financial fundamentals and organizational stability to continue funding development in core product platforms.
- Aastra consistently exhibits good financial fundamentals and organizational stability. Top management has been successful growing Aastra by the judicious acquisition of companies in related and complementary markets.

Cautions

- While it has made some progress in moving its platforms to multimedia and support for video with BluStar, Aastra's development effort is not as progressive as leading competitors. This would not preclude organizations from considering Aastra for telephony, but may limit its strategic value for UC.
- Aastra has plans to offer its products as a software-as-a-service (SaaS) option for channel partners and customers, but fulfilling on this is a project for the 2013 time frame.
- In North America, Aastra distribution is very limited, compared with enterprise platforms from competitors such as Cisco, Avaya and NEC.

Alcatel-Lucent

OpenTouch is a new architecture that relies on the integration of Alcatel-Lucent enterprise and carrier intellectual property, and builds on Alcatel-Lucent's ability to serve enterprise businesses with premises-based technologies, cloud-based and a hybrid of both. Alcatel-Lucent reported growing revenue and a shrinking loss for the first quarter of 2011. Revenue for the period ending 31 March 2011 for the enterprise applications business was up by 5.2% over the same quarter in 2010, and has been profitable over the past three years. However, the company as a whole has more work to do to turn a profit. OpenTouch 1.0 integrates the OmniPCX Enterprise 10.0, as well as competitor telephony platforms through SIP, and provides a migration path from legacy OmniPCX Enterprise (OXE) platforms. Consider OpenTouch if your organization is already using Alcatel-Lucent as its core telephony provider and you find OpenTouch a compelling proposition.

Strengths

- Alcatel-Lucent's OpenTouch is a highly scalable proposition for enterprise telephony. The architecture is based on the widely used Genesys SIP server, and supports a strong migration path for multimedia communications, while cementing the strategy to satisfy both enterprise and carrier customer requirements from a common platform.

- OpenTouch integrates the OXE Communication Server as a key part of its architecture, either as a preintegrated element of a single server solution or as the telephony foundation utilizing a large or complex OXE installed base, while providing numerous failover options.
- Alcatel-Lucent has expertise and resources that can satisfy complex, large-scale requirements for custom IP telephony solutions. The historical innovation of Alcatel-Lucent Labs (formerly Bell Labs) positions the company to offer solutions for complex problems that require a blend of many technologies, based on its continuing large investment in primary research.

Cautions

- OpenTouch is an ambitious new design, but not yet proven in a production environment. Furthermore, with Alcatel-Lucent confirming it is exploring strategic options for its Enterprise business, which includes the possibility of a sale, user investments in OpenTouch may be perceived as risky until it is clear there is a confirmed plan for future development; and how the OpenTouch enterprise architecture will be disaggregated from the carrier business that Alcatel-Lucent plans to retain.
- Alcatel-Lucent continues to struggle with sales execution and marketing for enterprise telephony in North America, where its distribution is composed mainly of small, regional value-added resellers (VARs) and a small number of service provider partners.
- OpenTouch is not a simple proposition and has suffered from poor initial marketing. The technical concept is likely to be understood much faster than the business value of the new architecture.
- Alcatel-Lucent needs to increase its list of global channel partners to help expand its footprint. Prospective buyers should confirm that the company has sufficient support resources in their respective geographies.

Avaya

Avaya Aura is a highly scalable telephony platform with local and enterprisewide failover options that extend to SIP and time division multiplexing (TDM) trunks, or a combination of both. One of Avaya's significant design objectives for Aura is to support real-time processing of SIP sessions for emerging multimedia business applications. Avaya's telephony market share dropped from 14.5% in 2009 to 13.7% in 2010 (using the combined Avaya-Nortel numbers to enable year-over-year comparisons). Overall, Avaya's telephony license shipments grew just over 4% during 2010, behind the average market growth of 10.2%. On 9 June 2011, Avaya Holdings, the parent company of Avaya, announced it had filed a registration statement with the U.S. Securities and Exchange Commission (SEC) for a proposed initial public offering (IPO) of $1 billion of its common stock. Consider Avaya Aura for satisfying the requirements of single vendor and multivendor communications environments; for deploying new UC solutions; or leveraging significant investments in Nortel or Avaya telephony by implementing Avaya's UC offers. Organizations can also draw upon Avaya's full range of networking, contact center, UC and collaboration products.

Strengths

- Global experience and large market share in telephony and contact centers enable Avaya to support midsize and large-scale deployments for organizations that prefer a single enterprise communications products and service provider.
- Avaya Aura Session Manager is a programmable SIP-based solution that enables organizations to uniformly or selectively deploy telephony and UC applications and services throughout the organization, rather than as separate applications tied to specific servers or geographic domains. The design supports scalability and transparency for routing sessions and sharing applications between Aura, and heritage-Nortel CS 1000, CS 2100 and AS 5300 portfolios, and also between IP-PBX systems from competitors of Avaya.
- Avaya's Agile Communication Environment (ACE) platform enables Avaya to deliver SIP-based communications-enabled business processes (CEBP), as well as solutions that interoperate with UC and business applications from disparate vendors. The platform also strengthens Avaya's vision to enable back-end processing of SIP sessions required by high-performance, real-time communications applications.
- Avaya's pricing is usually competitive, the result of initiatives taken during the past few years to reduce internal costs and selling prices for many products and services, as well as to simplify Avaya's pricing structure.

Cautions

- Some Gartner clients report that the availability of quality Avaya technical support personnel has diminished, which has resulted in lengthened response times. Gartner expects this to be temporary, as Avaya has an initiative to improve in this area.
- Challenges educating heritage Nortel customers and new Avaya partners about product transition options have created uncertainty for some Nortel users about the benefits of continuing to invest in platforms such as CS 1000. In addition, the new architecture and business value of Avaya Aura is not always understood by Nortel users and prospective buyers. More ongoing education is needed by Avaya to support these users.
- With consolidation going on within Avaya's business partner network, and numerous former Nortel dealers now representing Avaya, not all dealers are fully knowledgeable yet about the complete product portfolio and the most cost-effective transitions for customers.

Cisco

Cisco Unified Communications Manager (Unified CM) is a scalable enterprise telephony product that has established an effective presence in most countries. The company is benefiting from its leadership position in data networking, and is expanding its relationships with IT professionals by offering UCC solutions that include data center virtualization and cloud-based deployment options. In 2010, Cisco widened its lead as the top-ranked global provider of new telephony licenses, increasing its market share by nearly 3.5%, with a 42% year-over-year increase. Cisco is an obvious contender for virtually any organization's voice communications infrastructure. Also consider Cisco if you prefer one vendor to satisfy your data, UC, video and collaboration requirements.

Strengths

- Cisco has been very active promoting and proposing its virtualized version of Cisco Unified CM, which leverages VMware. Server options include Cisco Unified Computing System (UCS), as well as HP and IBM servers that comply with Cisco's published requirements. Cisco's virtualized data center environment leverages many of the customer's data center infrastructure components, such as data center management tools, storage and facilities, which contribute to a favorable business case for the total solution.
- Unified CM is complemented by a portfolio of Cisco data networking products, as well as a comprehensive UCC portfolio that includes software and devices.
- Unified CM is part of Cisco's collaboration business, which is one of the company's key growth areas and is, therefore, likely to see continued R&D and marketing investment, even as Cisco embarks on initiatives to reduce personnel and improve margins.
- Cisco's channels largely remain stable, productive and loyal, despite the impact of the global recession. The vendor has a strong go-to-market proposition via system integrators (SIs), service providers and network outsourcers, backed by a strong technology specialization and partner certification program.

Cautions

- Cisco's bundled pricing can increase TCO, especially for organizations that have yet to define a road map for UC. However, Cisco's introduction of User Connect Licensing (UCL) does mitigate this condition. To optimize costs, prospective buyers should compare the pricing for Cisco's bundled and unbundled solutions and licenses in the context of their own UC road map to determine which licensing approach represents the best financial alternative.
- As with any vendor, accepting Cisco's strategy to be a sole-source provider for IP telephony, the data network, Web conferencing, video, etc. can lead to reduced negotiating leverage and higher costs (see "Applying the Vendor Influence Curve to Unified Communications").
- Organizations can incur higher costs for multiyear Cisco Unified Communications Software Support (UCSS) agreements for scenarios where UCSS is charged for endpoints that have not yet been rolled out. This is important for companies that plan a multiyear phased deployment of UC.
- Unlike Cisco's corporate telephony competitors, which are open to using virtually any brand of networking equipment, Cisco representatives and its dealers often delineate the advantages of using an all-Cisco infrastructure to automate the configuration of Cisco's UC and collaboration products. However, the network infrastructures of other vendors can be configured to achieve similar performance (see "Debunking the Myth of the Single-Vendor Network").

Digium

Digium's Asterisk enterprise telephony solution is based on open-source software. The SIP reference architecture and protocol have operated for enough years now for the business model to become credible for organizations that use third-party network integrators to build, support and plan their telephony and UC environments in small businesses or branches of large enterprises. Digium's product Switchvox is a good fit for companies that want a low-cost turnkey solution suited for small business or small offices of large organizations with a distributed architecture for telephony. Its road map plans for Asterisk, Asterisk Scalable Communications Framework (SCF) and Switchvox to support increasingly larger enterprises.

Strengths

- Asterisk is the best-known brand supporting open-source telephony, with its main attraction often being the free source code, Digium has built a subscription licensing model and support ecosystem.
- Digium's development road map has been accepted by the often-critical open-source community and embraced by organizations whose business culture accept the use of open source (with its internal support requirements) and understands the support required for installation, configuration, operations, integration and life cycle planning.
- Asterisk products are intended for deployment on commodity hardware, such as IBM, HP, Dell servers, Ethernet switches and SIP phones. Its virtualization uses Linux, VMware ESX, Xen, Debian or other open source and runs on Amazon's Elastic Compute Cloud (EC2).

Cautions

- Digium is a relatively small, privately owned company; therefore, the usual cautions about trading apply, but any risks are mainly around the support provided, rather than the fundamental availability of open-source code and an active developer community.
- While Digium's solutions are currently firmly targeted at telephony and are beginning to address UCC, the TCO to support a CEBP environment needs to be considered and its functionality evaluated.
- Although most open-source telephony solutions now effectively embrace UC, the UC solutions typically have more-limited functionality than leading commercial proprietary products. However, Asterisk users have found open-source telephony to be valuable when planning custom CEBP integrations.

Microsoft

Although Microsoft Lync is relatively new, Gartner client inquiries indicate many businesses are nonetheless evaluating Microsoft Lync to replace or augment PBX systems, or they are holding off on telephony decisions until Lync becomes a more mature telephony offering (see "Microsoft Lync Migrations: Early Reports and Best Practices" for more insight on Lync implementations). While the company is not listed as one of Gartner's top vendors in telephony, it is a leader in the UC market (see "Magic Quadrant for Unified Communications"). The inclusion of desktop devices enables Lync to address a broader range of telephony users. The introduction of survivability for the branch office and call admission control enables organizations to better plan their networks for the inclusion of Lync users. Feedback from early adopters has been positive. However, many users also indicate they are not yet ready to replace their telephony solutions until Lync's real-time telephony functionality becomes more dependable. We believe Microsoft will significantly improve these capabilities by the end of 2012 or early 2013. Lync is an appropriate choice for organizations committed to Microsoft that want to focus on adding UC to knowledge workers' desktops complete with telephony. A phased migration would provide the lowest risk, and the opportunity for organizations to acquire new technical competencies, including desktop, networking and telecom support.

Strengths

- The addition of IP handsets with partners Polycom, snom and Aastra delivers the voice user wideband audio, color display, integrated calendar, presence and click to call for voice, video, conferencing or screen sharing without any integration effort for half the price of the leading competitors in telephony.
- Microsoft is a financially viable company, with huge mind share, marketing and sales resources to influence buyers of telephony. This is supported by the substantial interest experienced through Gartner client inquiries for voice applications.
- Microsoft's collaboration-centric approach and deep integration with Office 2010, including Outlook 2010 SharePoint 2010 and Office 365, gives it greater credibility in addressing top-level business process issues. This strategic focus helps with sponsorship at the senior level in IT organizations to drive the adoption of Lync in the business unit.

Cautions

- While the introduction of call admission control is positive, organizations will need to look closely at how to re-engineer their WANs to provide quality-of-service support to the required number of multimedia users. Real-time processing of media, when required, might also be restricted.
- Microsoft's partners still have to grow their experience with some of the more complex requirements, such as networking Lync in an environment with established telephony platforms.
- Microsoft licensing agreements are arguably the most complex among software vendors. Consequently, ownership for Client Access Licenses (CALs) needs to be clearly understood, especially where budgeting for UC has been split between IT and telephony functions. Organizations need to decide not only which budgets will fund the enterprise voice telephony and UCC CALs, but also the amount TCO will vary up or down during a three-year or five-year period.
- Despite some early positive Lync references, Gartner does not yet see Lync 2010 as an outright replacement for the IP-PBX. Our recommended configuration is that Lync should interface to the existing telephony estate through direct SIP with the Lync users' direct dial redirected to Mediation Server. Existing IP-PBX may then be retained for front-office and some basic back-office functions for the rest of the IP-PBX license term.
- Compared with its major competitors, Microsoft does not yet have an established direct or indirect channel that is strong in selling voice and telephony applications.

Mitel Networks

Mitel's new CEO and president has reorganized the company to address seven flat quarters of revenue. His goals include focusing Mitel's portfolio on the midmarket and expanding Mitel's relationship with VMware for virtualization. In the U.S., Mitel has also been increasing its support for indirect sales and fulfillment, while seeking to minimize channel conflict. Although setting its sights on organizations up to 2,500 users, Mitel's largest controller supports up to 5,000 devices. Overall, given Mitel's longstanding presence in the global telephony market, its large installed base, recent success selling large contracts, and proven ability to be innovative, we believe Mitel's course adjustment will be effective. Small, midsize and large organizations should consider Mitel for solutions with distributed sites, in vertical market segments, such as retail and education, as well as when it's desirable to leverage a VMware environment using industry standard servers.

Strengths

- Mitel builds on its Mitel Communications Director (MCD) 3300 ICP infrastructure for call control and facilitates the use of industry standard servers and VMware (vSphere 4) for its virtual MCD and hosted Multi-Instance Communications Director (MICD). It targets virtualized desktops, data centers and cloud delivery of compound communications.
- Mitel's branded "Freedom" converged communications architecture is based on a service-oriented architecture (SOA) framework that can be deployed centrally within a virtualized environment.
- Mitel Teleworker capability enables Mitel IP phones to be deployed at home or remote locations, extensions over the public Internet with no VPN required.
- Mitel offers its UC applications, including VMware-certified Mitel Communications Director, to run in a virtualized environment. The offering can streamline communications infrastructure costs, simplify the implementation and reduce the ongoing operating costs.

Cautions

- The limited availability of SIP trunks globally can restrict the viability of using Mitel's converged communications architecture in certain geographic regions. However, in software-only deployments, which include CaaS, Mitel can utilize gateways in the event SIP service is not available.
- Many Mitel dealers have not yet developed experience installing and supporting Mitel solutions in a virtualized environment. Evaluate the skills and experience of the channel partner in addition to the potential costs and benefits of the technology.
- As part of Mitel's ongoing work to improve its financial position, the company has scaled back some of its customer and channel support resources, which has resulted in some clients reporting a negative impact on channel and customer responsiveness.

NEC

NEC is a strong global player with two main alternatives for the corporate telephony market. Its Univerge SV8500 IP communications server supports 4,000 endpoints in a single server, and up to 192,000 endpoints in a single system with multiple servers. The platform is targeted at NEC users who prefer a gradual migration to IP, while leveraging their investments in the NEC Univerge product family. Sphericall is a softswitch intended mainly for new telephony and UC installations, but can also bring its broad range of UCC and application development capabilities to Univerge SV8500 users. One Sphericall system with multiple servers supports up to 30,000 endpoints. Consider NEC for solutions requiring scalability, high availability and multiple levels of redundancy.

Strengths

- NEC is a large, diversified, global firm with extensive resources that can be leveraged for product and channel development purposes.

- NEC has internal specialists focused on supporting its strength in vertical markets, such as hospitality, health, government and education.
- Multiple servers running Sphericall software can be installed in different parts of the network to allow for dynamic load balancing. In addition, integration with certain media gateways allows for remote survivability when connection to the main site is lost.

Cautions

- While the SV Series is generally available worldwide, NEC is in the process of expanding Sphericall's distribution in global markets to match that of the SV Series.
- NEC's extensive product lines are targeted at SMBs, as well as large enterprises, so not all dealers have experience designing, installing and supporting large deployments. Prospective buyers should confirm the capabilities of specific NEC channel partners.

ShoreTel

ShoreTel scales from 10 to 20,000 users on a single platform. While ShoreTel's technology has been particularly well-suited for SMBs that have distributed communications requirements, ShoreTel has made a lot of progress since last year with enterprises of more than 1,000 users that are centralized or have many branch offices and retail sites. For room-based video collaboration capabilities, partnerships with Polycom and LifeSize enable configuring SIP endpoints on the ShoreTel system. The company sells mainly through partners in North America, but continues to focus on growth in other global regions. ShoreTel will appeal to organizations looking for IP telephony systems that are easy to install, have very intuitive management and user interfaces, and support UC capabilities, whether by integrating with Microsoft Lync, IBM Sametime or by using ShoreTel's UC client.

Strengths

- The ShoreTel telephony system has an IP architecture that can support many users in a widely distributed environment and is inherently redundant. ShoreTel switches are independent appliances, with software that supports built-in gateway and server functions. Growing system capacity for software, trunks and users is accomplished by adding switch modules that can be administered from a centralized interface, regardless of where the platforms are physically located.
- ShoreTel consistently gets very high satisfaction ratings from its channel partners and customers.
- ShoreTel survivability is enabled with N+1 failover capability to another node located anywhere in the network.
- ShoreTel's revenue growth has exhibited consistently healthy improvements for nine consecutive quarters starting in 1Q09, and the company was able to acquire Agito's UC mobile technology in late 2010 for an all-cash amount of $11.4 million.

Cautions

- ShoreTel Version 12 includes support for VMware. However, the solution currently requires use of ShoreTel appliances at remote sites to support native failover capabilities.

- ShoreTel 12 offers point-to-point video, but does not yet support multipoint video functionality.
- ShoreTel has been successful growing its share of the North American enterprise voice communications market. However, while revenue in EMEA and the Asia/Pacific (APAC) region is up substantially, distribution resources outside these regions is lagging.

Siemens Enterprise Communications

Siemens Enterprise Communications' (SEN's) primary enterprise telephony solution is OpenScape Voice. It is a highly scalable, standards-based platform that can support a premises-based or cloud solution, or a combination of both. In 2010, SEN's global shipments of telephony licenses declined by 3.9%, compared with 2009. Its market share declined from 9.3% to 8.1% for the same period. Typically, OpenScape Voice solutions appeal to SEN customers that want to upgrade older HiPath 4000 and Hicom 300 installations, as well as very large organizations wanting to deploy a single, highly resilient system globally that can be managed centrally from multiple locations. In addition, the recently announced OpenScape UC Server Xpress packaged solution addresses the midmarket customer. The introduction of subscription licensing at the end of 2010 provided customers with greater sourcing options.

Strengths

- SEN's enterprise business focus has resulted in new OpenScape Voice license shipments that are growing, and highest in Europe and South America.
- For new systems, SEN has offered significant discounts for both "right to use" and subscription-based SaaS licensing. Maintenance pricing has also been attractive.
- SEN can support international companies that standardize on Siemens technologies for telephony and UC. This can be beneficial in building confidence with customers transitioning to UC.
- The multitenant capabilities of OpenScape Voice will be useful to organizations looking to adopt SaaS models for telephony, where offered by service providers.

Cautions

- Benchmark multiyear support costs to maintain a lower cost of ownership with SEN solutions, as some customers renewing support contracts find SEN prices to be higher than those in previous agreements.
- The partnership between The Gores Group and Siemens AG has continued beyond the October 2010 time frame, when Siemens AG initially said it would exit. While continued use of the Siemens brand is important for continuity, it can be expected that a rebranding may be pending in the foreseeable future, which should not adversely affect operations.
- North American telephony license shipments dropped 32% from 2009 to 2010 — a year when the North American market averaged a 14% increase. This weak performance highlights SEN's need to expand its North American distribution channels and technical support.

Toshiba

In the U.S., Canada, the U.K., parts of the APAC region and Japan, Toshiba continues to provide reliable system performance, cost-effective price points and migration capabilities to IP technology and UC. The company's products will appeal to SMBs with centralized requirements, as well as larger organizations that need to support remote sites in vertical markets, such as retail, automotive, banking, financial and government.

Strengths

- All Toshiba Strata CIX series systems use the same applications, endpoints, cabinets and interfaces, with the capability to support a wide range of wired and wireless devices, as well as softphones.
- Released in June 2011, the IPedge series is an IP solution built on a Linux-based platform. IPedge features telephony, VM/UM, IM/presence, conferencing/Web collaboration, and SIP trunking capabilities in a single server architecture.
- Although the Strata CIX and IPedge solutions are positioned to customers in the same size segments, both offerings will be supported going forward. The Strata CIX solution supports digital and IP devices, while the IPedge is a pure IP-based solution.
- In the U.S. and Canada, a unique national accounts program, centrally managed for customers by Toshiba, will appeal to organizations with locations that cross regional boundaries. The plan offers uniform pricing of products and services for applications that require deployment across multiple sites.

Cautions

- Although parent company Toshiba is a large, diversified manufacturer and marketer of electronic and electrical products, the communications business does not have any presence in the large-enterprise market in EMEA, nor does it have a global strategy that focuses on IP telephony requirements outside the U.S., Canada, the U.K., parts of the APAC region and Japan.
- Maximum capacity for the Strata CIX and IPedge series is 1,000 users on a single system. However, multiple systems can be networked for additional capacity and distributed configurations, and an optional AudioCodes gateway can automatically reroute incoming calls to an alternative Strata CIX or IPedge system in the event of a failure.
- Organizations could find integrating platforms, such as Microsoft OCS and Lync, with Strata CIX and IPedge a challenge, because the solution requires the integration of various servers to achieve full UC functionality.

Evidence

Our research is based, in part, on:

- Feedback derived from Gartner inquiries, which amounts to more than 900 end-user client discussions per year.
- More than 100 face-to-face meetings with clients.
- Vendor responses to detailed questionnaires specific to this research.

- Interviews with vendor references.
- Periodic vendor briefings during a 12-month interval.
- Generally available information, news and data in financial and industry publications.
- Attendance at vendor analyst conferences and industry tradeshows.
- Discussions with Gartner peers during research communities.
- Gartner management critique, peer review and vendor review and confirmation.

Vendors Added or Dropped

We review and adjust our inclusion criteria for Magic Quadrants and MarketScopes as markets change. As a result of these adjustments, the mix of vendors in any Magic Quadrant or MarketScope may change over time. A vendor appearing in a Magic Quadrant or MarketScope one year and not the next does not necessarily indicate that we have changed our opinion of that vendor. This may be a reflection of a change in the market and, therefore, changed evaluation criteria, or a change of focus by a vendor.

Evaluation Criteria Definitions

Ability to Execute

Product/Service: Core goods and services offered by the vendor that compete in/serve the defined market. This includes current product/service capabilities, quality, feature sets, skills, etc., whether offered natively or through OEM agreements/partnerships as defined in the market definition and detailed in the subcriteria.

Overall Viability (Business Unit, Financial, Strategy, Organization): Viability includes an assessment of the overall organization's financial health, the financial and practical success of the business unit, and the likelihood of the individual business unit to continue investing in the product, to continue offering the product and to advance the state of the art within the organization's portfolio of products.

Sales Execution/Pricing: The vendor's capabilities in all pre-sales activities and the structure that supports them. This includes deal management, pricing and negotiation, pre-sales support and the overall effectiveness of the sales channel.

Market Responsiveness and Track Record: Ability to respond, change direction, be flexible and achieve competitive success as opportunities develop, competitors act, customer needs evolve and market dynamics change. This criterion also considers the vendor's history of responsiveness.

Marketing Execution: The clarity, quality, creativity and efficacy of programs designed to deliver the organization's message in order to influence the market, promote the brand and business, increase awareness of the products, and establish a positive identification with the product/brand and organization in the minds of buyers. This "mind share" can be driven by a combination of publicity, promotional, thought leadership, word-of-mouth and sales activities.

Customer Experience: Relationships, products and services/programs that enable clients to be successful with the products evaluated. Specifically, this includes the ways customers receive technical support or account support. This can also include ancillary tools, customer support programs (and the quality thereof), availability of user groups, service-level agreements, etc.

Operations: The ability of the organization to meet its goals and commitments. Factors include the quality of the organizational structure including skills, experiences, programs, systems and other vehicles that enable the organization to operate effectively and efficiently on an ongoing basis.

Completeness of Vision

Market Understanding: Ability of the vendor to understand buyers' wants and needs and to translate those into products and services. Vendors that show the highest degree of vision listen and understand buyers' wants and needs, and can shape or enhance those with their added vision.

Marketing Strategy: A clear, differentiated set of messages consistently communicated throughout the organization and externalized through the website, advertising, customer programs and positioning statements.

Sales Strategy: The strategy for selling product that uses the appropriate network of direct and indirect sales, marketing, service and communication affiliates that extend the scope and depth of market reach, skills, expertise, technologies, services and the customer base.

Offering (Product) Strategy: The vendor's approach to product development and delivery that emphasizes differentiation, functionality, methodology and feature set as they map to current and future requirements.

Business Model: The soundness and logic of the vendor's underlying business proposition.

Vertical/Industry Strategy: The vendor's strategy to direct resources, skills and offerings to meet the specific needs of individual market segments, including verticals.

Innovation: Direct, related, complementary and synergistic layouts of resources, expertise or capital for investment, consolidation, defensive or pre-emptive purposes.

Geographic Strategy: The vendor's strategy to direct resources, skills and offerings to meet the specific needs of geographies outside the "home" or native geography, either directly or through partners, channels and subsidiaries as appropriate for that geography and market.