



**Information and Analysis on the Telecommunications and
Unified Communications Solutions from**

MITEL NETWORKS

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Executive Summary

Mitel Networks provides communications solutions for a wide range of organizations—from very small, single-site offices to multi-site, large enterprises. The company has a worldwide presence and its products are highly innovative. Mitel offers a broad range of solutions, from basic business communications to sophisticated unified communications (UC), with a gamut of options. The company may be the only vendor that offers both premise-based and managed and branded network services including its own branded mobile service. Various market share reports rank Mitel as the third or fourth largest with regard to telephony market share.

Mitel was founded in the early 1970s and participated in several industry transitions (analog, TDM, VoIP and UC). In a bold move, Mitel acquired competitor Inter-Tel in 2007—probably not the best strategic move and certainly not the best timing. Integration challenges during a major recession made a tough situation worse. The acquisition brought to Mitel two platforms, two business units, new sales management and a network of branch sales offices. But unfortunately, it also brought product overlap, channel conflict and distractions, and a need to integrate products. Surprisingly, it doesn't appear Mitel engineering was too disrupted—new versions and products kept coming out, most recently Mitel Communications Director (MCD) 5.0. Several of the applications associated with each platform were ported to work with the other.

Mitel went public in 2010 on the NASDAQ stock exchange (MITL) largely to reduce its debt associated with the acquisition. Again, not the best timing. The US was in a recession, the IPO market was flat, and it was not a great year in general for stocks. Mitel was no exception. Soon after the IPO, CEO Don Smith retired; he had been CEO for nine years and oversaw Mitel's shift from hardware to software, the Inter-Tel acquisition, and the IPO. He remains on the Board of Directors. After Smith retired, the board appointed Rich McBee as the new CEO in January 2011.

Also on the board and Mitel's chairman is Sir Terry Matthews, co-founder of Mitel. Matthews had already successfully sold Mitel once before. He returned about a decade ago, took the company private and shepherded Mitel's transition from TDM to UC, with an IPO and a major venture interest from Francisco Partners along the way. Matthews is both a telecom veteran and a well-regarded investor—not one who normally loses.

At the heart of Mitel's product line is the Mitel Communications Director (MCD), which refuses to be categorized. The product offers so many options that Mitel markets it as a "Freedom Architecture." The range of customer choices is impressive: MCD can be implemented as an appliance, as software for industry standard servers, virtualized on a VMware instance, or even subscribed as a hosted service. MCD can be deployed as a comprehensive UC solution or simply as a gateway or voice mail solution. It integrates with multiple messaging platforms, and works with a wide range of endpoints. Service providers can purchase a version of MCD that enables hosted voice as a business model.

MCD is accompanied by several other simpler calling platforms—the Mitel 5000 CP hardware hybrid solution is attractive to smaller organizations, its SX-200-ICP is a fixture in the hospitality industry, and its 3000 platforms are suitable for small business. However, MCD is the flagship and where the innovation lies. In addition to a high degree of flexibility (or "Freedom"), Mitel has industry-leading competitive strengths around virtualization and mobility. MCD, along with its applications that frequently complete the solution, can be virtualized in VMware environments. The integration is so complete that VMware administrators need not make special accommodations for the Mitel unified communications solution. The software suite does not require specialized hardware or management tools, or dedicated VMware resources. Virtual systems can be blended with hardware-based Mitel solutions (or not) as a seamless UC deployment.

MCD's mobility features also offer impressive depth and breadth. Customers seeking breadth will find smartphone applications for iPhone, Android and RIM. Additionally, MCD offers non-smartphone solutions for traditional cell phones via the Dynamic Extension feature. Teleworker, hot desking and UC Advanced round out the work-anywhere agenda of MCD. Users looking for depth will be impressed with features such as location awareness on the mobile clients, or single sign-on with VMware View and MCD hot desking. In short, MCD is not a shallow solution; it has impressive capabilities and flexibility.

But the cold reality is MCD's features and architecture go largely unnoticed by many organizations seeking these exact features. Mitel enjoyed a strong reputation with telecom managers, particularly in hospitality. But over the past decade, while Mitel diversified its offerings, the buyer changed, and the CIO, or IT leadership, is not as likely to be familiar with Mitel. Mitel clearly needs to expand and/or build its market awareness. The company is looking to its indirect sales channel to assist in this task and is implementing numerous changes to strengthen its distribution and sales effectiveness.

Mitel appears to be in a reasonable competitive position. Its products are current with a wide range of UC features and capabilities. Some major architectural product changes have already largely been accomplished by the company. Due to the IPO, Mitel significantly reduced its debt. New management is shaking things up and refocusing on sales channels. Perhaps most importantly, Mitel is enjoying a close partnership with VMware, a current IT darling. This relationship includes several technical underpinnings that are not easily replicated.

Mitel Networks Overview

Overview

Folklore posits that Mitel was initially intended to be a lawnmower company and gets its name from its two founders, Terry Matthews and Mike Cowpland: **MI**ke and **TE**rry's **L**awnmowers. Whether the legend is true or not, Mitel has never sold lawnmowers, and instead has provided business communications systems for over 30 years. The Canadian company was founded in 1972 and has successfully transitioned through several major industry shifts.

In 2010, for the second time, Mitel became a public company (NASDAQ: MITL). Mitel's products serve both very small and very large organizations, but the company currently targets organizations with 100 to 2,500 extensions, the sector where it has realized the best results. Mitel operates in 90 countries but generates the majority of its revenue in six: US, Canada, UK, Netherlands, France and Australia.

Today, Mitel is organized into three separate business units: Mitel Communications Solutions (this is what most people know as "Mitel"); Mitel NetSolutions, which provides carrier services (wired and mobile); and Mitel DataNet/CommSource, a distributor of complementary products. Mitel Networks reported 2010 overall revenue of \$650 million USD with a gross margin of 48 percent. Each business contributed as follows:

- Mitel Communications Solutions: Revenue \$485 million USD, GM 54 percent
- Mitel Network Solutions: Revenue \$80 million USD, GM 47 percent
- Mitel DataNet/CommSource: Revenue \$85 million USD, GM 15 percent

Recent Performance

In June 2011 Mitel announced lackluster FY2011 results. The company showed negligible growth with revenue of \$649.7 million USD compared to FY2010 at \$647.9 million USD. Net income for 2011 sharply increased to \$88.1 million USD compared to 2010's \$37.2 million USD. FY2012 will be the first year under the management of Rich McBee.

In 2007, Mitel acquired Inter-Tel, a fairly bold move as the two companies were about the same size in revenue. Market consolidation was reasonable, and Mitel saw a complementary fit with Inter-Tel. Inter-Tel's sales were largely North American small businesses, and Mitel's sales were more international with mid-sized customers. The combined company could break a billion in revenue—at least on paper.

The merger was complex. It took Mitel longer than anticipated to consolidate the products and channels. Additionally, Inter-Tel's 40 direct sales offices created channel conflict within the Mitel dealer network, and the two cultures and channels of the companies were very different. The situation worsened in 2009 with the beginning of a major recession that impacted the entire industry. The debt was high and combined revenue was down. Mitel completed an IPO in 2010 (arguably, not the best timing) with the stated objective of paying down debt. The company is now listed on NASDAQ as MITL, but the stock price has declined steadily during its first year. Aggravating the reported results, the company missed guidance on its first two quarters as a public company.

After the IPO, CEO Don Smith retired (he remains on the board) and was soon followed by President Paul Butcher. Rich McBee joined as CEO in 2011. The company admits the timing and execution of the merger wasn't great, but believes it is now positioned for success and growth. Management cites better-aligned products and

channels, little momentum lost in product development, and the company's emergence from deep debt. Mitel blamed its poor sales growth on merger-created US channel problems that have now been addressed.

Citing a weak channel is not particularly unique. The industry is experiencing major changes exacerbated by a weak economy. Quite simply, many dealers are not making the transition from IP telephony to unified communications. Mitel's strong reputation in telephony has not crossed over to IT, where the company suffers from poor name recognition. The good news is Mitel Communications Director (MCD) is a strong product with multiple competitive advantages that are difficult to imitate. MCD has key strengths around virtualization and mobility as well several core design strengths such as its "single stream" approach. The company reports it holds a solid third position in worldwide market share.¹

In September 2011, Mitel announced its FY2012 first quarter results with revenue of \$164.1 million USD. This exceeded company guidance of \$158 million USD to \$162 million USD issued in June. However, most of the growth actually came from DataNet/CommSource. The company issued guidance for 2Q12 with incremental growth in revenue.

¹ "According to market research firm MZA Mitel is in a solid #3 market position globally in respect of IP desktop shipments in

Current Portfolio

Mitel offers a wide range of platforms and applications. MCD is Mitel's core and strategic platform. The 5000 CP is suitable for simpler and/or smaller implementations. Mitel considers the 5000 CP functionally mature, signaling a reduction in its ongoing development. Mitel positions its SX-200-ICP for the hospitality sector, and the Mitel 3000 is offered for SOHO and residential applications.

Mitel MCD Features at a Glance

- ✓ MCD is a software-based solution, available as software or preinstalled on Mitel hardware.
- ✓ Broad support for virtualization
- ✓ Strong solutions for mobility
- ✓ Built-in unified messaging
- ✓ Contact center
- ✓ IVR
- ✓ Built-in mobility features
- ✓ Highly customizable
- ✓ Strong UC suite (UCA)
- ✓ Web-based administration
- ✓ Native SIP trunking
- ✓ Available in several flavors—appliance, S/W, vS/W, service

Mitel Communications Director (MCD)

Mitel Communications Director is Mitel's flagship communications platform. MCD started off as the Mitel 3300 ICP, an appliance VoIP solution introduced in 2001. In 2009, Mitel unbundled its software from the hardware. The appliance continues to be known as the Mitel 3300 ICP (now referring to the hardware only), and the software component became known as MCD. Decoupling MCD from various deployment considerations is a recurring theme with MCD, culminating in what Mitel calls its Freedom Architecture to describe its numerous configuration and deployment options.

The key thing to keep in mind with MCD is its roots were an all-in-one system. The Mitel 3300 ICP was a single-box VoIP solution that included traditional PBX functionality as well as voice mail, gateway services, call center and more. Because it was positioned as a VoIP migration path with Mitel's legacy SX2000 PBX, MCD also fully supports digital infrastructure. The software is now a decade old and has morphed into several products, all sharing the same core software. Mitel refers to this design approach as "single stream" development. The current offerings are:

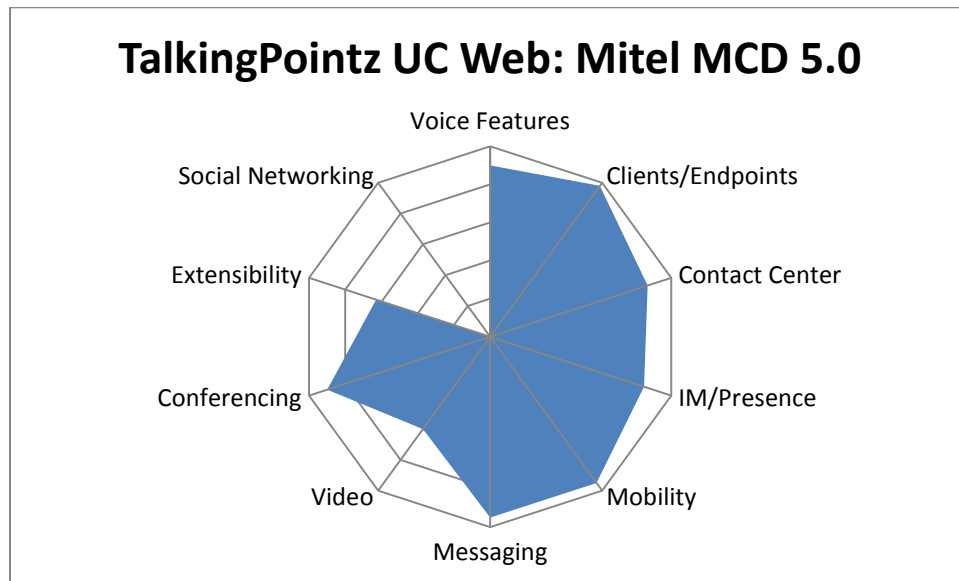
- Mitel 3300 ICP appliance (several models)
- MCD software for industry standard servers
- vMCD optimized for VMware implementations
- MICD, Multiple-instance Communications Director, optimized for service providers or large enterprises
- Mitel AnyWare, the hosted version, sold per seat per month, offered by Mitel NetSolutions

MCD features and core call control are the same regardless of the hardware platform. An organization can deploy MCD on a single server, or a cluster of servers, or with distributed servers. Branch offices can network to a data center, or use a local server for primary or failover situations. In all cases, the core server is the same, and Mitel allows user licenses to migrate deployment designs without penalty.

The appliance concept generally refers to hardware-based telephony, but in Mitel’s case, the appliance is simply an optimized server for MCD. Each appliance model supports PSTN hardware for analog, T1/E1 and PRI. Some models are equipped with POE Ethernet switches, and some support connections to Mitel cabinets for digital infrastructure. One controller model, optimized for hospitality, supports nearly 300 analog extensions in one chassis. Mitel offers an advanced server-on-a-card expansion option for its appliances so it can host separate Mitel applications within a single chassis.

MCD has a modular licensing model, meaning that an appliance configured as a PSTN gateway is reasonably cost competitive because only MCD’s trunking capabilities are activated. MCD has built-in voice mail (licensed per mailbox and can host various Mitel UC applications such as a wireless gateway). This approach allows Mitel to sell MCD as a Trojan horse. A customer in need of an SIP to PRI gateway, for example, could acquire a Mitel 3300 ICP appliance for that purpose and, once installed, could subsequently add a few phones, voice mail boxes, teleworkers, mobility apps and so on. The majority of these features can be licensed one phone at a time—the core software is already there.

MCD supports multiple servers in a single deployment—up to 999, or effectively more than necessary. Initially the 3300 ICP required a separate server administration tool to manage multiple servers, but over the years, competition and Moore’s law conspired to make multi-server deployments a native feature. This is significantly strengthened in Release 5.0. However, MCD does not send out updates in real time. Instead, changes are propagated through a scheduled synchronization utility. Resiliency is also addressed with multiple servers. Mitel offers licensing solutions so IP phones can automatically failover to a secondary controller if the primary becomes unavailable.



Mitel MCD has an impressive footprint on the TalkingPointz Web (see Appendix B: UC Market Overview for more information on the [TalkingPointz Web](#)) as indicated above. Its PBX heritage shows up with strong scores around voice, endpoints and contact center solutions. MCD’s call control is very mature and its built-in features are very broad, including a skills-based ACD with broad mobility features. “Built-in” means the functionality is there; licensing is a different matter. Mitel offers a range of endpoints including wireless solutions, softphone options and a rich UC client. Mitel’s advanced contact center solutions are fairly robust. The presence solution from Mitel is nicely integrated into its UC Advanced offering, but does not support federation or public gateways.

MCD has strong desktop video features with UC Advanced—even a multi-party software-based video bridge. No video endpoints are offered other than desktop webcams through UC Advanced. Mitel does not offer any direct or partner-based solutions to interface with mobile devices, room-based or telepresence systems. There are known solutions for telepresence through Magor Communications, and Polycom's desktop video phones are known to work on MCD, but neither is considered here as the TalkingPointz Web only evaluates capabilities from Mitel and its strategic partners.

In regard to conferencing, MCD has numerous options including eight-way conferencing as a base feature. Of Mitel's several conferencing and collaboration solutions, the most feature-rich is Mitel's Collaboration Advanced solution, which is also suitable for webcasts. Regarding extensibility, Mitel supports the typical interfaces associated with the PBX era, enabling features such as call recording and call accounting from third parties—however, its APIs and SDKs are a bit limited from a Web-era perspective. At this time, Mitel has no solutions for integrating with public or private social networking technologies, but has stated plans to do so in its near-term MCD roadmap.

Mitel is one of the few traditional PBX vendors that broadly include the cloud in their UC reinvention. Mitel has two hosted strategies (MICD and Mitel AnyWare) and also encourages virtualization for private cloud implementations. MICD is aimed at the growing market of voice service providers (or large enterprises) and allows for almost completely distinct and independent instances of the software—even at different versions. It is also suitable for self-hosting enterprise customers serving multiple locations and/or divisions.

Mitel NetSolutions uses MICD to host its Mitel AnyWare service. Many of the Mitel UC applications are available in the solution. The vast majority of competitive hosted voice service providers expect customers to purchase an inexpensive third-party entry-level SIP phone. Mitel AnyWare currently includes a mid-level Mitel IP phone. This endpoint, though SIP capable, is set to use Mitel's proprietary MiNet protocol, which provides rich phone-top features not found in most SIP-based alternatives.

Licensing

MCD licensing is both a core strength and liability. The strength, as with most Mitel strengths, is its technical approach. Not long ago, Mitel keyed its software licenses to system hardware. This was and remains a common practice in the industry. The traditional PBX had a unique system ID, and software licensing was locked to that system. The model worked well for decades, but as the industry moved from hardware to software, and from physical to virtual servers, a new approach became necessary. Mitel completely redesigned its approach to licensing around 2009. Mitel now takes an enterprise software approach to licensing and validates licensing via the Mitel Applications Management Center (AMC). The AMC is a result of Mitel's 2001 acquisition of E-Smith, a pioneer in managed services.

This change in licensing is what fueled Mitel's commitment to virtualization. A physical server can be paired for resilience with a virtualized server on VMware. An MCD backup of a physical server can be restored to a virtual server and vice versa. This gives MCD significant flexibility around capacity and resiliency. It might seem fairly obvious as a strategy, but it is far from common.

The liability around licensing is complexity. Where other vendors create separate products for gateways and branch offices, Mitel does it all with MCD and licensing. Ask not what MCD can do, but what license is required to do it. Virtually every MCD feature has its own set of licensing options. IP phones are licensed differently for SIP or MiNet. The three types of voice mail Mitel offers are all licensed differently. The MCD voice mail is licensed per user, while the standalone NuPoint voice mail server is licensed per port. NuPoint can also be licensed as part of the Mitel Application Suite (MAS) (per mailbox) and there it includes features that are licensed separately in the standalone NuPoint.

Virtualization and Mobility

MCD does offer significant competitive strength in the areas of virtualization and mobility. Despite how much Mitel screams about this strength, its message gets diffused partly because of the complexity of the topics, but also because the majority of Mitel's competitors make similar claims. Both of these areas involve multiple layers of capabilities and benefits that are not initially apparent.

Virtualization is rapidly becoming key to IT strategy. For some, the trend is driven by the motivation to stretch hardware budgets, or by a response to constrained hardware space. But for the majority of users, exploring virtualization has more to do with operational economies. A virtual environment allows resources to be added, removed and re-allocated as needed. Traditional computing resources are frequently underutilized; virtualization allows pooled resources to more efficiently meet pooled demand. Virtualizing resources also simplifies the design for high availability and disaster recovery.

Server virtualization represents the single most important re-architecting of the data center in modern history. The shift has to do with how IT views and delivers its services and positions IT for a blend of distributed, centralized, and cloud based solutions. The undisputed leader in this space is VMware. Most market share reports show VMware with 70 percent to 90 percent of the server virtualization market (vSphere). In 2010, VMware reported annual revenue growth of 49 percent, including a 95 percent increase in operating income. More recently, in October 2011, VMware reported third-quarter earnings more than doubled on demand growth across its products. The company issued fourth-quarter revenue projections largely higher than the consensus forecast from a survey of analysts by Thomson Reuters.

Initially, virtualization and real-time communications were incompatible. Instead, communication vendors virtualized related applications, but not call processing. Processors and virtualization software matured, and the solution was discovered. In early 2010, Mitel and VMware jointly announced the first virtualized call processing solution (MCD and vSphere). Mitel created vMCD, which was MCD shipped in a vSphere-ready format. Over the years, Mitel has released virtualized wrappers for all of its MCD products (vMCD, vMAS, vMBG, vUCA and vCCS).

Mitel appears to enjoy a tight relationship with VMware. The two companies continue to issue regular joint statements, most recently in September 2011 when they mutually announced the first softphone implementation on a virtual desktop (VMware View and Mitel UC Advanced). The two are found together at each other's major events. Both recognize each other in their various forms of partner programs.

Several UC vendors are happy to claim virtualization capabilities, but noisy distractions abound in this area. Not all support VMware, and not all those that do are certified by VMware. Some only virtualize applications and not call control. Many solutions are still tied to hardware, so their virtual solutions can only be moved or restored to environments on identical hardware. Then there are management issues to consider. Mitel integrates its applications with VMware's vCenter management tools, and all of Mitel's vProducts tightly integrate with vCenter. This allows the MCD environment to be managed with the same tools and processes that data centers are adopting for other virtualized applications. Mitel is leading the industry with its level of integration with VMware—call processing, all applications, VMware certifications, vSphere-ready implementations, and tight integration with vCenter create a very real virtual advantage. These feats are not easily copied, and they afford Mitel a competitive advantage in this area.

Mobility is also a core strength for MCD. The mobility solution set includes Teleworker, Dynamic Extension, smartphone clients, UC Advanced, and hot desking. Teleworker is Mitel's solution that allows Mitel phones to connect over the Internet. The phones operate as if local, with all phone-top features. MCD has clients for all the major smartphones and tightly integrates with RIM's MVS. The smartphone clients are very rich—supporting numerous advanced features including location-aware routing. Non-smartphone users can utilize Dynamic

Extension, which is an advanced form of simultaneous ring. MCD continues to monitor Dynamic Extension calls for star-code commands, so users can still access features such as transfer. Dynamic Extension users do not require a Mitel phone at all—the mobile device can be the primary extension. Mitel’s UC advanced client runs on Windows desktops and on virtualized desktops by VMware View, including softphone functionality. The client allows calls (in and out) to work with any PSTN phone. Hot desking allows users to log in to a phone to make it theirs, which is attractive for organizations with highly mobile staff, as fewer phones can be deployed to support a greater number of users.

MCD supports location aware routing, a highly innovative feature. MCD dynamically determines a user’s location from the smartphone client (using GPS), or by detecting Bluetooth or Wi-Fi signals. MCD then can update presence status and call routing rules if appropriate (e.g., send calls to voice mail when at church). This feature capability is currently rare among competitive offerings.

Release 5.0

Mitel MCD release 5.0 (released Fall 2011) offers the following major features:

- Management improvements
- Contact center improvements
- Licensing improvements

The 5.0 management improvements bring a laundry list of fixes and improvements. The biggest by far is a major improvement with how MCD integrates with Microsoft’s Active Directory. A user can now be almost completely configured in MCD from external systems via Active Directory synchronization.

For the contact center, Mitel finally brought its Dynamic Extension to the ACD. This means remote users can now be call center agents—potentially using their home phones with call center features such as reporting and monitoring. A related improvement is a 40 percent increase in agent capacity.

New in MCD 5.0 is a core MCD service called License Manager that switches the paradigm to activate first and ask questions later. This addresses a very real problem that plagues the industry regarding failover servers that reuse licensing. License Manager enables and tracks licensing and enforces license compliance later. It simplifies the failover scenario, as well as enabling new capabilities such as “try before you buy” and allows users to over allocate and then purchase.

Until now, the AMC was used by Mitel and its dealers to manage and distribute licensing. With Release 5.0, enterprise end users now can manage enterprise licensing directly on the AMC. A customer with multiple MCD systems can reallocate licenses should various locations contract and expand.

An interesting feature found in 5.0 is support for Redundant CPU. It is unknown why Mitel prioritized this feature, but MCD now can run on Stratus ftServers (models 2600 and 4500) for deployments that require processor redundancy. As one might expect, these servers are also typically configured with RAID, hot swappable drives, redundant fans and dual network connections. Mitel clearly has its sights on some mission-critical opportunities.

Selected Mitel Applications

MAS

The Mitel Application Suite is Mitel's application platform that can host multiple, optional applications for MCD or 5000 CP. The Application Suite, like MCD, runs on a Linux-based server supported on industry-standard servers or a virtualized virtual container. Most applications within the suite can be licensed per user; the MAS represents a platform. Applications supported in the suite include: UC Advanced, Mitel NuPoint Unified Messaging (UM), Mitel Speech Auto-Attendant, Mitel Unified Communicator (UC) Mobile, Mitel Collaboration Advanced, Mitel Customer Service Manager (CSM), Mitel Business Dashboard, and Mitel Teleworker Solution integrated with the Mitel Border Gateway (MBG).

Mitel Unified Communicator

Mitel Unified Communicator comes in two flavors: Unified Communicator Express (UCE) and Unified Communicator Advanced (UCA).

Express, now free, is a serverless desktop client that provides base-level desktop integration such as click-to-dial, incoming caller-ID popups, call lists and integration with personal contacts in Microsoft Outlook. The client itself is a toolbar that enables users to manage telephony features from the desktop computer. UC Express is supported on MCD and the 5000 CP. MCD users can optionally add a softphone known as UC Express Softphone.

Unified Communicator Advanced is Mitel's flagship UC offering. It is a desktop suite and server solution that transforms MCD and/or the 5000 CP into a rich UC solution including desktop telephony controls, Web and mobile phone features, softphone capabilities, and presence/IM. UC Advanced has several unique features such as the ability to add context to the outbound caller ID on internal calls and the ability to promote an IM session into a voice or video conversation. The IM and presence solution uses XMPP and can connect to external services. Key features of UCA include:

- **Dynamic Status:** Allows the user to specify IM, presence and call routing from the client, a Web browser or a mobile portal. Or status can automatically update based on the user's Outlook calendar.
- **Softphone:** UCA has the ability to control the user's hard phone and/or replace it. Additionally, a user can use UCA to designate any number (cell, home) as their primary number for both inbound and click-to-dial outbound calling.
- **Instant Messaging:** IM or chat, single or multi-party. Integrated document sharing. Encrypted and logged. The only public gateway option is with MSN.
- **UCA clients:** Smartphone clients for Blackberry, Android, and IOS enable access to corporate directory, view or change status, access call logs, visual voice mail and outbound corporate dialing. A unique feature is geo-awareness, which allows a user to define via GPS, Bluetooth and/or Wi-Fi specific locations which impact both status and routing.
- **The UCA client supports desktop point-to-point video calling between UCA clients only. However, multi-user video conferencing is supported.**

Mitel Collaboration Advanced (MCA)²

MCA integrates with the 5000 CP and MCD platforms. The product provides collaboration and conferencing tools for users, including audio conferencing, webcasting and document sharing. It supports up to 200 conferencing “ports.” MCA is an optional add-on to MAS and also is supported on Virtual MAS.

Many organizations justify unified communications by eliminating external conferencing services. Owning MCA eliminates usage fees and offers several unique features such as integration with Microsoft calendaring, multiple hosts, whiteboarding and integrated recording. MCA sits outside the firewall for Internet access, so it works in conjunction with MAS and MBG.

NuPoint Unified Messaging

All Mitel platforms offer an optional integrated voice mail. NuPoint is Mitel’s high-end feature-rich solution. It is sold as a standalone server, a virtual server application or an option on the Mitel Application Suite (MAS). Numerous features on NuPoint are unavailable on Mitel’s integrated messaging solutions, including text-to-speech email reading, fax support, additional call filtering and routing options, and fully synchronized integration with both Microsoft Exchange and IBM’s Domino servers. NuPoint also offers personal distribution lists, broadcasts, and numerous greeting options. Services can be accessed from the user’s email client, a Web portal, a Mitel phone or any phone. NuPoint has most of the expected advanced messaging features, as well as a few extra such as the ability to announce a user’s presence status before routing a call. An optional Speech Server package upgrades the auto attendant to route calls via voice prompts. Mitel prices NuPoint by the port and the built-in MCD voice mail by the mailbox, making NuPoint actually less expensive for larger deployments.

Mitel Border Gateway (MBG)

MCD should be securely placed inside the data center without direct connections to the Internet to mitigate security exposure. However, applications such as Teleworker and MCA and, potentially, Internet SIP trunks are delivered to the data center via the Internet. MBG insulates and offloads the call director by performing the external public-facing services. Also, separating the trunks from the primary call director provides an additional level of resilience, as a backup MCD can replace the primary in a failover situation.

Mitel 5000 Communications Platform (CP)

The Mitel 5000-CP, previously known as the Inter-Tel 5000, is a hybrid communications appliance offering digital and IP communications for small business and branch locations. Its hybrid architecture is particularly well suited for organizations seeking a migration strategy to VoIP. Its design supports add-on modules and processors in a form factor designed for shelf-top, rack-mount and wall-mount scenarios. The 5000 CP may be networked with or migrated from the legacy Inter-Tel Axxess systems. The 5000 CP can support up to 250 users.

The 5000 CP supports hot desking, meet-me conferencing, ACD and enhanced mobility, and teleworking, and offers built-in messaging. Most Mitel applications now work with both the 5000 and MCD platforms including the Mitel Applications Suite (MAS), the Mitel Unified Communicator Express (UCE) and the Mitel Unified Communicator Advanced (UCA). The 5000 and MCD also share the same IP phones, but Mitel digital phones are not compatible between platforms.

² MCA is the new name for the Mitel Audio and Web Conferencing solution which Mitel obtained from Inter-Tel.

Other Communications Platforms

The company offers two other platforms. The Mitel **SX-200-ICP** is the current incarnation of its first mid-size PBX, originally known as the SX-200. The 200 platform has a fair degree of penetration in hospitality. Prior to the 5000, Mitel positioned the SX-200-ICP for hospitality and small to mid-sized businesses. Now the product is relegated to hospitality which requires very little ongoing research and development. The Mitel SX-200-ICP is widely supported among hospitality property management software makers. Mitel also offers the 3000 platform, which came from Inter-Tel—and in fact Inter-Tel acquired it by purchasing Lake Communications (UK) in 2005. The **3000** is suitable for SOHO and residential markets.

Mitel Endpoints

Mitel designs its own desktop devices, but no longer manufactures them. Its IP phones work across the 5000, 200, and MCD platforms. All Mitel IP phones are dual boot—SIP or MiNet (Mitel's proprietary signaling protocol). Most Mitel endpoints are HD/wideband audio and contain graphical displays. Some of the more advanced phones support add-on peripherals such as integrated DECT handsets and headsets, Wi-Fi transmission and GB networking. This fairly unique approach eliminates the need for those ridiculous handset lifters associated with wireless headsets.

A unique line interface module (LIM) adds analog functionality to an IP phone. A remote home worker could have one phone for both work (IP) and home (analog). Emergency calls (911 in US) are automatically routed out via the analog interface. Mitel also produces specialty desktop devices, including IP operator consoles and conference units. Mitel's approach to conference saucers is to offer them as phone accessories or add-ons. This eliminates the need for conference rooms to have a secondary, familiar phone. Wi-Fi and DECT phones produced by partners are also available from Mitel.

Although Mitel phones include SIP client software, they are rarely used in SIP mode. It makes little sense to use a Mitel phone in SIP mode on a Mitel platform. Since the phones are not widely distributed via Internet dot-coms, and SIP mode requires an esoteric key code boot combination, the SIP version of the phones is rarely used outside of Mitel implementations.

Key Partnerships

Mitel has two broad categories for partners, Strategic and Solutions Alliance Partners. Exactly what constitutes a strategic partnership isn't very clear, but Mitel boasts five such partnerships. These should not be confused with Mitel dealers, which the company refers to as "authorized partners."

Strategic Partners

Mitel's five strategic partners are: HP, Microsoft, RIM, Oracle/Sun and VMware; only one and a half of these is truly significant. The HP partnership is actually with the division formerly known as HP ProCurve that produces network switches and routers. Obviously, VoIP and video equipment require quality network infrastructure. The partnership appears to be loosely based on the fact that neither company considers the other as a competitor, but both have common competitors. HP swallowed up the ProCurve division in a reorganization. There is little if any evidence of this partnership being significant to either company.

Years ago, Mitel worked closely with Microsoft and was featured in Microsoft's demonstration centers despite the fact Microsoft and Nortel had a strategic partnership at the time. Mitel tightly integrated with Microsoft's Live Communications Server. Microsoft and Mitel's partnership faded when Microsoft positioned itself as a UC provider with its own telephony capability as that product evolved. Mitel promotes its integration with Active Directory, Exchange and Office. Mitel is happy to discuss its strategic integration with Microsoft Lync when asked, but generally doesn't bring up this offering. MCD also can natively integrate with Exchange should users prefer a single, unified messaging server.

The Sun relationship was more robust before the Oracle acquisition of Sun. Mitel developed a strong solution for thin client desktop computing integrated with Sun's Sun Ray solution. Effectively, a Mitel phone was the only desktop device needed—the monitor, keyboard and mouse connected to the phone, and a single login took care of both voice (hot desking) and data (Sun Ray environment). Sun was on track to becoming one of Mitel's largest resellers. But after Oracle acquired Sun, emphasis on both Sun Ray and the channel shifted. The solution is alive and well, but much less discussed by either company. However, most of that effort is evident in the Mitel VMware VDI solution.

Mitel is one of the few voice vendors to tightly integrate with RIM's Mobile Voice System (MVS 5.0). This solution provides seamless Blackberry-MCD communications across 3G/4G and Wi-Fi networks. MVS integration enables several features, including the ability to make an outbound MCD call from the mobile without requiring the dreaded ring-back, as is common with most solutions. The obvious damper on this achievement is the fact that RIM is rapidly losing relevance in mobility. Just a few years ago, RIM held the coveted top slot in enterprise mobility. Although its revenue and market penetration remain large, the company is reeling in response to smartphone competition. Mitel has since launched Android and Apple/iOS clients.

By far, the most strategic of the strategic partnerships is VMware (NYSE: VMW). Mitel is working closely with VMware and betting heavily on virtualization. **Mitel has a very real virtual portfolio as a competitive strength.** Because VMware is poised as one of the most popular Internet/cloud companies, Mitel hopes VMware's success will create demand for its products. (Find more discussion on Mitel and VMware throughout this document.)

While Mitel is openly and visibly committed to VMware, the reciprocal relationship is much less visible. VMware supports several telephony partners, the kind of date that dances with everyone at the ball. VMware does not appear to be rallying its channel toward Mitel, nor does the company even use Mitel at its headquarters. However, there are indications that VMware recognizes and appreciates Mitel's efforts. VMware awarded Mitel its Best Technology Innovator award in 2010. A VMware executive also presented a keynote at Mitel's dealer event in 2011, and Mitel and VMware have made several announcements jointly.

Mitel Solutions Alliance

The Mitel Solutions Alliance (MSA) is Mitel's developer and partnering program for third-party firms that integrate with Mitel's core communications platforms. Mitel maintains a Global Solutions Catalog (GSC) with hundreds of Mitel integrated/interoperable solutions. MSA solutions fall into one or more of the following five categories:

- Plug-Ins & Integrations: Microsoft, Salesforce, Sage, Oracle, SAP
- Connectors & CEBP: TAPI, CSTA, .NET middleware
- Contact Center: Call Recording, Mobility, Speech Solutions
- Vertical Applications: Hospitality, Financial, Health care
- Regional: Targeted solutions for US, Latin America, Europe or Asia

The program is currently undergoing updates, and now has three levels of membership:

- Developer (standard membership)
- Gold Preferred (members whose products are resold by Mitel)
- NEW: Platinum Preferred (strategic members, may be resold by Mitel)

Mitel lists approximately 50 [MSA partners](#) on its website. The following are representative of the MSA partner list.

Developer MSA Partners:

- AVST: A leader in messaging and speech applications centered on its CallXpress platform. CallXpress integrates with the Mitel SX-200, SX-2000 and MCD solutions.
- Inn-Phone: Inn-Phone designs and manufactures custom telephone handsets for the hospitality and medical vertical markets.
- Phybridge: Provides technologies that allow customers to reuse their traditional voice cable-plant for VoIP. The primary product is the UniPhyer, which enables Ethernet and POE over a single pair of category-3 cables.

Gold Preferred

- OAISYS: Provides call recording and voice documentation products marketed as Tracer and Talkument. The solutions are designed to capture and retain business communications as a means to improved operations.
- Syntellect: Provides an advanced contact center solution that integrates with the Mitel MCD solution.

The MSA program is a very mature model for telephony and relies heavily on mature interfaces such as Mitel's MiTAI and OAI as well as basic interfaces such as SMDR, SNMP and IMAP. Mitel does not currently support modern Web-based interfaces such as WOA and JSON.

Wesley Clover

Wesley Clover is a separate organization that invests in and develops start-up companies in networking and telecommunications sectors. The organization was founded by Sir Terry Matthews, co-founder of Mitel and current chairman of Mitel, Wesley Clover and others. Wesley Clover companies frequently round out Mitel solutions via the Mitel Affiliate program. The degree and scope of these affiliate relationships vary. Martello is a Wesley Clover company and Mitel Affiliate that offers managed services for Mitel platforms. Additionally, some

Wesley Clover companies initially rely upon DataNet/CommSource for distribution. The following Wesley Clover companies frequently appear in Mitel presentations (* indicates a Mitel Affiliate):

- **Benbria*** provides customer notification solutions. The 2011 Product of the Year as awarded by Unified Communications magazine, Benbria's flagship product, BlazeCast, offers multi-media delivery and response to information.
- **Cambrai*** partners with Mitel to optimize delivery of communications as a service with one or many Mitel Communication Directors. In providing a single, Web-based access point, service providers can manage customer sites and give customers a self-service solution for purchasing value-added products and services.
- **Isca Networks*** designs and develops innovative kiosk applications using next-generation IP telephony and Web technologies.
- **Magor** provides telepresence and video conferencing solutions that integrate with Mitel MCD.
- **Martello Technologies***, a Mitel partner, provides value-added network management services for Enterprise VoIP, UC and LAN infrastructure and Service Provider Access networks. The MarWatch product provides Monitoring and Remote Access for the Mitel 3300 ICP IP Communications Platform, MCD, MICD and vMCD IP PBXs, and the underlying IP infrastructure that enables VoIP and UC. MarWatch monitors VoIP quality and network performance to provide visibility of potential and actual performance issues.
- **NetVitesse*** designs and develops Web-based communications software for enterprises. The company offers Communications-Enabled Business Process applications, location-aware solutions and interoperability solutions for IP devices. NetVitesse solutions are targeted at a large segment of VoIP technology users, with a strong emphasis on the security, hospitality, education and governmental market segments.
- **Teldio*** provides radio to telephony communications, alarm management and indoor positioning solutions. The technology can be specifically deployed to enabled Motorola radios to seamlessly integrate with Mitel MCD. Via its Application Suite, Teldio has become the bridge among mobile, telephony and alarm networks, ensuring the maximization of communication technology investment by significantly reducing recurring costs.

Common Sales Objections

The following are objections likely to be raised in the sales process—often by competitors. As is the case with most simple objections, there is more to the story. Below, each issue is addressed in greater depth. Each objection contains a paraphrased, unofficial response characterizing Mitel’s assumed position, followed by analysis of the matter.

Just look at their stock performance

Objection: Mitel lost about half of its value in its first year of trading and it continues to decline. Is the company going down?

Response: The acquisition of Inter-Tel was highly disruptive and not well executed. The company now acts as one, but it took much more effort and time than initially anticipated. The timing was also unfortunate due to a major recession beginning in 2009. The acquisition also introduced some conflict within Mitel’s sales channel. To correct these problems in the US, Mitel simplified the portfolio, putting primary emphasis on MCD and 5000 CP. The company has announced a number of changes and programs to strengthen its channel, thus sales performance. New sales leadership (Phil Keenan) was named in early 2011.

Analysis: It should be noted that Mitel has few directly comparable public competitors—most of its competitors are more diversified, private or much smaller. However, the sector was generally hit hard, and layoffs were common throughout the industry. The majority of competitors, including the market share leaders reported losses or stock declines in 2010. Stock performance and analysis is outside the scope of this research; however, the company is now reporting profits, and its sales growth is generally neutral to positive.

Mitel's lack of growth can be attributed to many things including problems with the economy, the acquisition, brand recognition and sales channels. The products, particularly MCD, seem viable, current and competitive. Mitel has put considerable portion of the blame on its channel programs, and is making numerous changes in that area. These changes should help, but may not be sufficient. Along with many of its competitors, Mitel intends to expand its channel. Poor brand recognition and a steep learning curve will likely prolong that effort. Channel and branding problems are not easily or quickly solved. However, its products are strong, and riding VMware’s coattails may prove an effective strategy.

This is the first time Rich McBee has held the CEO position of a public company, and a good chunk of Mitel’s senior management is unproven. McBee has made several significant changes since accepting the position. Guiding the company is some impressive talent on its board of directors. Chairman Terry Matthews holds extensive experience and an impressive track record in management in general and specifically with telecommunications. Also on the board are two partners from Francisco Partners (venture capital), and CFO Steve Spooner.

Mitel lacks a complete solution

Objection: Mitel is a telephony player. It requires multiple vendors to fill its gaps in areas like switches and messaging. It makes more sense to go with a single vendor for a complete solution.

Response: Mitel was early to the UC marketplace starting with its early transition from digital to VoIP. The company offers a broad range of UC tools including presence, video and collaboration. Additionally, Mitel

positions itself as a best-of-breed play with its Freedom Architecture positioning, and works well with leading vendors to complete its solution.

Analysis: There is merit to a best-of-breed solution, and realistically there are few if any options for single vendor UC. No single vendor has phones, mobility, video and messaging all nailed. Prospective customers need to weigh the trade-offs associated with best in breed vs. a more comprehensive offering against the backdrop of organizational objectives and requirements. Mitel's UC Advanced solution interfaces with both Outlook and Notes messaging and can extrapolate status from calendars. Its integration with VMware is very deep, and Mitel intends to soon integrate with VMware Zimbra. Mitel supports Active Directory and supports mobility clients on multiple platforms. Customers can select the server platform, brand and deployment style that fits their environment best.

Mitel's Freedom Architecture concept drives at best of breed by reducing lock-in. MCD offers choices around servers, supports multiple messaging platforms, presents a menu of rich integrated applications, and offers its own hard and soft endpoints as well as supports SIP-compliant options. MCD can be deployed in front of existing TDM architectures, and to users that don't even have PBX phones at all. This is real flexibility, both today as well as during potential data center transitions.

Mitel cannot keep up with the innovation of the industry

Objection: In the past year, Mitel has performed layoffs, received financial downgrades and replaced its CEO and other leaders. The company is retrenching and can't possibly keep up.

Response: The recession that started in 2009 continues. The majority of the sector experienced layoffs, and Mitel did grow its revenue in FY2011 (barely). Mitel continues to innovate and will emerge from the recession stronger than it went into it.

Analysis: The industry is moving very rapidly. Two key areas of rapid change include mobility and virtualization, where Mitel holds competitive advantages. Mitel has legitimate first-mover advantages in UC virtualization, and its progress in the hosted market is significantly ahead of its premise-based competitors. The company has recently announced new mobile clients that are location aware—ahead of the industry. The first softphone on a virtualized desktop was announced with VMware in September 2011. Deep mobile integration with RIM MVS is not widely supported. Mitel was among the first premise-based vendors to offer a hosted service (AnyWare). Recently, the company released MAS 3.0 and MCD 5.0, both with significant upgrades.

Mitel is behind on video, and still offers no video or visual collaboration to mobile devices. The NetSolutions partner that offers rich collaboration as a service (iLync) was recently acquired by Broadsoft (no immediate changes were announced). The fact is the industry is moving very fast, and so is Mitel. There are a lot of moving parts in play industry wide. Prospective customers should evaluate a most pertinent issue: Whether or not Mitel has prioritized the key pain points that are driving the customer's need to replace the current communications solution.

Mitel is just a hospitality company

Objection: Do you really want a business solution from a company focused on the hospitality market?

Response: Mitel does well in hospitality as it provides a proven, reliable, cost-effective solution. Hospitality is an important part of the business, but by no means the entire business. Mitel offers VoIP and UC solutions to several verticals including education and health care as well as general business users around the world.

Analysis: The concept that a company can only be successful in one area of business is repeatedly proven to be false. In this case, it makes little sense, as hotel telephony is at least telephony, whereas many of Mitel's competitors are far more diversified. This issue could carry credence if Mitel were trying to impose hospitality solutions on other sectors, but that is not the case. Mitel's MCD portfolio includes broad business applications suitable for a wide variety of business users. Mitel does not pretend to be the right solution for everyone—it has narrowed its focus to the less than 2,500 market, and is clearly focusing on its virtualization and mobility strengths (neither of which resonate with hospitality). Mitel should not be punished for its past and concurrent successes.

Doesn't everybody support virtualization?

Objection: Mitel makes a big deal about virtualization. So what? Every major UC software maker now supports virtualization.

Response: Mitel is one of the few voice solutions fully certified by VMware. UC virtualization compliance should not be viewed as a simple tick-box topic. Mitel is fully committed to a virtualized architecture, and believes its UC solutions should be treated the same as other business software applications without limitations or special considerations.

Analysis: There is considerable confusion around this area, but Mitel does hold numerous benefits. Vendors increasingly claim support for VMware, but getting VMware to also certify the solution is less common. MCD and its applications can coexist on VMware servers with other business applications instead of requiring dedicated virtual instances. Mitel's licensing has no ties to hardware, so services can be restored to any VMware instance—dynamically. Mitel's applications are also integrated with VMware's management tools.

In August 2011, Mitel announced improvements with VMware's VDI solution, View. The two major components include the ability to run a softphone in this virtual desktop (an industry first) and single-sign-on support. MCD has long supported hot desking, the ability to transform a communal phone into a personal extension with a login code. Now this is integrated with View, so a single login transforms the desktop and the phone into the user's personalized desktop.

Mitel has also successfully integrated its suite of products into the vCenter, the VMware management platform. This allows administrators to manage Mitel applications in the same way that other virtualized business applications are managed. It is easy to conclude that all vendors equally support virtualization based on marketing.

The weakness in Mitel's virtualization story is its single focus on VMware. Mitel is not a good fit for organizations standardizing on either Citrix or Microsoft for server virtualization. However, the virtualization support Mitel offers with VMware is industry-leading in degree and capabilities.

SWOT Analysis

Strengths

Engineering

Mitel is consistently ahead of the curve on product engineering. The company was early to VoIP itself, unified messaging, HD/wide-band audio, SIP and virtualization, to name a few. Mitel unbundled software and hardware on its core offering in 2009. This separation led to MCD support on multiple platforms including its VMware container offerings. Significant changes in the platform's licensing model (away from hardware-based licensing) give Mitel numerous competitive benefits, including an ability to virtualize and eliminate duplicate licensing for resilience. Mitel has consolidated many independent applications into MCD or in MAS.

Virtualization

Mitel enjoys a cozy relationship with VMware, the leader in server virtualization. The two companies have jointly announced several breakthroughs associated with unified communications. Mitel was the first to announce virtualized call processing on vSphere, the first virtualized softphone on the VMware View VDI solution, and has tightly integrated its applications with VMware vCenter. Mitel's virtualized products carry few restrictions commonly associated with real-time communications, although capacities are generally lower in virtualized environments.

Internationalization

Mitel is an international brand with worldwide distribution. Several of its loyal customers have dragged Mitel into some 90 countries. However, the majority of its international sales (and efforts) come from six countries. Mitel is a suitable option for multinational organizations seeking to standardize on a few brands. The company supports 15 languages.

Mobility Depth

Mobility support has become key to business communications. Enterprise telephony no longer ignores mobile telephony, and the industry as a whole is clamoring to better integrate mobile devices. Mitel offers a very broad and deep solution set around mobility and is generally ahead of the industry. For example, Mitel was among the first enterprise UC vendors to introduce location awareness in mobile clients in 2010. Mitel's Dynamic Extension moved from a separate server into a native capability (separately licensed) in the MCD and 5000 platforms. Mitel was among the first to deeply integrate with RIM's MVS solution; the company offers smartphone and tablet clients on the three leading platforms; and NetSolutions offers network-based mobility solutions. Also, Teleworker, hot desking/single sign-on, and UC Advanced solutions complement MCD's core mobility solutions.

Interoperability

Mitel has worked with other vendors to enable complete UC solutions including layered levels of integration with Microsoft Exchange and IBM's Lotus Notes. For example, its UC Advanced solution can change status or call routing based on an Outlook or Notes calendar (as well as presence status and location). Mitel's voice mail solutions can integrate with Exchange or use Exchange as the sole voice mail server. Mitel's TAP program encourages dealers to earn certifications from other point solution vendors in virtualization, mobility and networking. The concept of the Freedom Architecture gives customers a far higher degree of choice than most competing solutions.

Single Stream Software

Mitel has a significant benefit with its Single Stream approach to software. MCD is suitable for a variety of sized customers. It can operate in standalone, resilient or clustered configurations. But more importantly, Mitel develops one set of core software that impacts MCD, vMCD, MICD, Mitel AnyWare, its appliance offering on the 3300 ICP, and some MCD applications. The core software is mature and broad. It supports analog, digital and VoIP infrastructure, a rich set of applications, and an evolved set of telephony features. The Single Stream solution positions Mitel for centralized or distributed environments deployed in a premise, private cloud and/or hybrid configuration.

Software Based

As the industry migrated from hardware to software, most vendors moved toward industry-standard server components or branded server bundles. Mitel went further and allowed customers to acquire their own industry standard servers from the likes of Dell, HP and IBM. This independence from hardware was the first step toward Mitel's virtualization strategy. This is not a trivial accomplishment and represents direct and indirect competitive benefits. Mitel had to completely revamp its approach to licensing without using hardware or dongles for authentication. Mitel licensing has protections against piracy, yet user licenses can still easily reauthorize with new physical or virtual instances of MCD.

Endpoints

With the rising popularity of SIP phones, many vendors now downplay their handset lineup. Mitel phones are dual boot and support both SIP and MiNet (proprietary) loads with extended features. Mitel offers a wide range of branded phones that support HD audio, POE and full duplex speakers. Some of the models offer upgrades to integrated wireless handsets and/or headsets. Mitel designs, brands and supports these endpoints but outsources manufacturing. Several Mitel phones support GB networking, while the industry standard remains 100 MB.

Hosted Offering

Mitel is one of the few vendors with one foot in the premises and another in the hosted voice market. Both spaces are expected to grow, but as mutually exclusive solutions per location. (See [Mitel AnyWare](#) and [Hybrid](#).) Additionally, direct experience as a solution provider helps with it develop the MICD product. However, existing and prospective MICD customers likely consider Mitel AnyWare as a direct competitive offering.

Voice Heritage

The UC industry is broader than the voice industry and includes vendors coming from different areas of strength. For example, some UC vendors do not offer a native solution for voice at all. Although voice is less important than it once was, that status is a far cry from not being important at all. Most organizations still consider their voice infrastructure critical. New entrants in UC offer varying degrees of voice competency. Mitel leveraged its experience from its TDM legacy heritage and offers a relatively rich VoIP capability in its solutions. MCD evolved directly from Mitel's SX-2000 platform, representing more than 30 years of telephony experience.

Professional Services

Using independent dealers as the primary channel can be very effective for sales, but poses a challenge for national deployments and support. Mitel is playing the channel card on new sales, but is concurrently investing in its direct professional services capability. National professional services are available to dealers for projects out of their comfort zone (technically or geographically). A direct professional services team takes some business away from its channel, but gives Mitel a coveted network of skills and services many competitors can't match.

Resilience

Mitel offers numerous levels of survivability including redundant hardware and the ability to failover to resilient systems. This is particularly critical for organizations that intend to use virtual servers as backups and are not constrained to like hardware with Mitel's VMware optimized solution. Since Mitel's licensing is not tied to hardware, numerous recovery options are available. Additionally, Mitel does not require users to double their user licenses to obtain resilience.

Weaknesses

Channel

Mitel's single biggest weakness (and priority) is strengthening its inconsistent and generally weak channel. Clearly, some stars exist, but Mitel has some big coverage holes geographically as well as technically. Over the past five years, Mitel's products have changed dramatically, requiring a far broader base of experience and skills. Not all of its channel partners have kept up. Further complicating matters is that Inter-Tel dealers were selling relatively simple systems largely on price. Mitel needs a channel with a deep bench of technical skills around virtualization (specifically VMware), carrier services and mobile technologies. Mitel has publicly identified this as a top priority, along with plans for recruitment of new partners. The challenge is largely due to Mitel product depth and complexity; a quick fix is not imminent.

Distribution

When Mitel acquired Inter-Tel, it opted to cut ties with its two-tier distributors and began selling directly to its dealers (as of 2011, Mitel does not sell directly to end users). Two-tier distributors rarely drive demand, but do provide services to dealers including training, best practices, complementary products, financing, demo gear and reseller recruitment. Often, distributors are better than manufacturers at these functions, but charge for their

services. Many traditional PBX vendors still gravitate toward direct dealer sales. Mitel also now carries the burden of dealer receivables.

Mitel may have a challenge in restoring two-tier distribution with reputable IT distributors. These organizations place high value on brand and demand. Additionally, Mitel DataNet/CommSource itself is a distributor that distributors may consider as competitor. DataNet/CommSource currently offers general Mitel distribution, but reportedly that represents a very small part of its business. On the other hand, Mitel does a reasonable job at distribution and retains the margin. The issue isn't distribution per se, but more about channel development and expansion.

Video

Mitel MCD with UC Advanced supports desktop (webcam) point-to-point video only. MCD does offer broad mobile solutions, but so far has not announced a desktop-to-mobile video solution. Mitel has relied on Magor, a Wesley Clover company, in the past to deliver high-quality telepresence solutions. However, Mitel does not consider Magor, or any other vendor, a strategic partner for video conferencing. Customers interested in broadly integrated video solutions will need to craft their own best-of-breed solution.

Social Networking

Mitel does not offer any direct or integrated solutions around public or business-oriented social networking. However, the company has stated plans to integrate Social Media into its Contact Center Solutions Q410. The initial solution will integrate with YUPIQ, a social media monitoring application.

Too Many Platforms

Mitel is wrangling four platforms: MCD in numerous forms, Mitel 5000 CP, 3000 and SX-200-ICP—and that's if you only count MCD once. At its 2011 business partner conference, Mitel stated the 5000 was "mature," which required subsequent communications to reaffirm its future commitment to it. Clearly Mitel has its primary focus on MCD, but each platform requires support, training, distribution and management. The SX-200-ICP is defensible in that it is less expensive to maintain the existing platform than to recreate its hospitality features and pricing in MCD. The 3000 offers no visible justification for survival. None of the 3000's phones, applications or accessories works with other Mitel products, nor does the 3000 appear to fit strategically with any of Mitel's stated plans.

The 5000 does reasonably well, and Mitel's Ron Wellard reported to the channel earlier this year, "We have completed the 'heavy lifting' to make the 5000 an extremely competitive communications solution, and moving forward we will continue to invest development resources in the 5000 to keep it competitive." However, it appears the primary benefit to end users of the 5000 lies in pricing and packaging rather than unique functionality.

Branding

Mitel suffers from poor brand recognition in IT circles. It is strong in specific verticals such as hospitality, but business prospects commonly are totally unfamiliar with the company. This decreases Mitel's bid rate. It also forces the sales process to include background and qualifying information that competitors skip. However, Mitel has found a unique CIO door opener—it beats its VMware drum until the door opens.

System Monitoring and Management

Mitel integrates with VMware's vCenter management, but third-party SNMP management systems are severely limited. A separate but related company (one of the Wesley Clover companies) called Martello offers Mitel dealers managed service solutions. Mitel MCD has limited SNMP support. It does have a limited integration with Level Platforms, but most managed service providers don't integrate with MCD.

Complexity

Mitel solutions are relatively complex, particularly regarding licensing and SKUs. This complexity impacts the channel and end users. The channel faces a significant learning cycle to sell and service Mitel solutions. Users must sort through various licensing options, which have simplified recently. This problem is not terribly unique; as the industry moved from hardware to software, many vendors overcomplicated the options. As a result, some actually now tout simplicity as a compelling differentiator. It is a fuzzy line between flexibility and simplicity. Where other companies would create totally separate, simpler products, Mitel leverages MCD to fit numerous segments. Specific hardware and licensing requirements, however, create a list of caveats for each feature and option that require research. Several factors including version, licenses and capacities impact features such as how many ACD agents per system, which features are supported on which phones, which licenses are included in specific bundles, etc. Even after years of active simplification, Mitel suffers from a relatively complex product line.

Opportunities

Market Conditions

The past few years were fairly slow in unified communications. The overall industry showed modest growth in 2010 and sharp decline in 2009. During this period, Mitel extended its competitive technical gap, particularly with VMware and mobility. A significant portion of the mid-market remains on dated TDM technology, potentially creating pent-up demand for broader UC solutions. Many of its competitors are highly distracted with product migration and investment performance. Mitel has a window to exploit its strengths.

NetSolutions

Mitel may be the only major UC software vendor in the US that also offers branded network services. Customers can purchase SIP trunks, MPLS networking and even cellular services without any concerns regarding configuration and technical compatibility. SIP trunking, in particular, poses numerous compatibility challenges. Unfortunately, none of NetSolutions' services are unique or low cost.

Mitel could leverage NetSolutions to offer a richer experience. Services such as Skype and Google Voice blur the distinction between software solutions and services. Mitel's unified communications solutions, for example, don't include SMS or text messaging today. Mitel's mobility solutions work hard to provide a single public number, but that facade falls apart with the first SMS message. NetSolutions could be better leveraged to bridge products and services and create a competitive advantage difficult for competitors to match.

Virtualization

Mitel positions its virtualization solutions as industry leading. The company developed a powerful set of features around VMware's products. Mitel's advantages in this area are not typically apparent with simple yes/no questions—conveying them requires a conversation. Mitel has a great story, but telling it to the right audience is a challenge for the company. As the company increases its visibility in this emerging space with big wins, endorsements, and stronger support from VMware, it will benefit from market pull. The window is open, and Mitel is working to distinguish its brand and solutions as cutting edge.

Mobility

Over the past few years, the workforce has generally stopped showing up at the office. Mobility is critical, and every major UC vendor is racing to embrace the cell phone and smartphone in new ways. Mitel's mobility portfolio offers an impressive range of capabilities including mobile phones, but much more as well. Mitel was early with its "Teleworker" solution that enabled a remote Mitel IP phone to be set up seamlessly with a broadband connection. Dynamic Extension extends desktop phone features to any phone. Smartphone clients offer a wide range of features including presence, directory information and outbound dialing with Caller ID substitution. No smartphone is necessary with Dynamic Extension or the Mitel Mobility service NetSolutions. Alternatively, customers can simply use UC Advanced to direct in/out office calls to any nearby phone. Mitel was one of the first and few vendors to natively integrate with RIM's MVS. The company even offers its own branded mobile phone service. These tools collectively create a well-rounded approach to mobility.

Nortel Base

Reports indicate the majority of the huge Nortel base remains in service post-bankruptcy, inevitably to be upgraded sometime soon. Mitel offers MCD incentives to Nortel customers and also positions MCD as a means to reuse rather than replace a Nortel or legacy investment. By integrating MCD and Dynamic Extension to an existing Nortel solution, the customer can obtain industry-leading UC features including Mitel's mobility portfolio on a legacy Nortel system.

Sales Execution

The company hoped its newly acquired Inter-Tel dealers would embrace MCD and sell into larger opportunities. This proved to be the exception. Additionally, the Inter-Tel direct sales offices and dealer network introduced channel conflict and over expansion in some markets. The company replaced its sales leadership and is reducing direct sales efforts in an effort to normalize its channel. If Mitel can repair and ignite its sales efforts, the products appear positioned to compete strongly.

Internationally, Mitel is doing very well in the UK, largely as a result of its long-term partnership with BT. Mitel is also gaining traction in Australia and other areas in the Asia Pacific region. These markets are considerably smaller than the US but offer a small hedge against US economic swings.

Hybrid Model

Mitel's core business is premises-based UC solutions, but it has double downed with two cloud angles. Numerous research reports predict continued rapid growth of hosted voice solutions, particularly in small business. Mitel AnyWare is Mitel's direct hosted voice offer—reasonably priced with unique benefits. The service is based on

MICD (Multi-instance Call Director). Mitel offers MICD to hosted service providers or large enterprises that require the ability to separate instances of MCD among its users. This gives Mitel a seat at the table in the growing hosted sector. Mitel AnyWare also uses Mitel phones, thus contributing to demand for tightly integrated Mitel endpoints. These benefits are not widely enjoyed by direct major competitors.

Although it is not on the menu, Mitel AnyWare can be combined with a Mitel premises solution, creating a highly unique hybrid cloud solution. For example, an enterprise customer could use MCD in its main offices and use Mitel AnyWare at smaller branch locations—tied together with four-digit dialing and a single messaging solution. Mitel has and will offer this hybrid solution, but requires a custom quote.

Total Solutions

A trick Mitel learned from Inter-Tel is to wrap up the circuits, equipment and maintenance into a single monthly price it calls Mitel Total Solution. The offering can now include cellular, circuits, equipment, equipment maintenance and software assurance in a single predictable monthly price under a contract term. The service resonates with customers overwhelmed by the number of vendors and bills required to deliver a complete UC solution.

Threats

Hosted

The hosted voice space continues to experience growth, particularly among SMB customers. Without question, the market for premise-based voice solutions will shrink should this sector continue to expand. Mitel is active in both the emerging service provider market and the hosted service market as discussed [above](#). However, hosted growth is largely at the cost of premise-based solutions.

Standards

UC interoperability is emerging as an inhibitor to the industry. Other than PSTN phone numbers and email addresses, the vast majority of UC technologies are implemented with weak interoperability (particularly among video technologies). SIP, for example, is not a standard optimized for interoperability—most vendors and SIP carriers perform their own testing before declaring a particular pairing to be supported (compare this havoc to T1 and PRI).

Mitel is a member of the SIP forum, where many best practices are developed. A new consortium of UC vendors known as the UC Interoperability Forum was created in 2010, and Mitel is not a member.

On the other hand, Mitel should be acknowledged for creating a multi-vendor technical competency program for its channel partners. The [Technical Accreditation Program \(TAP\)](#) recognizes channel partners for a competency involving Mitel working with other products such as VMware or RIM MVS.

VMware Reliance

Mitel is currently using virtualization, specifically from VMware, as its chief means of differentiation. The technical head start it holds is legitimate, and the strategy appears sound. However, it is heavily reliant on a single external company. VMware is not exclusive with Mitel, but Mitel does seem to enjoy a tighter than usual relationship with VMware. A threat exists should VMware lose its cachet, be acquired by a Mitel competitor or acquire a Mitel competitor. Any of these developments could leave Mitel vulnerable if unable to cash in on its VMware investments.

Keys to Success

For Mitel

3+1

In 2011, Rich McBee announced what is known as Mitel's "3 +1 Strategy." The components are:

1. Simplify the Business
2. Focus the Portfolio
3. Align the Go To Market Model

+1 Exploit competitive advantages in virtualization and mobility.

The first initiative is aimed at internal operations. As a result of the merger and abandoned projects, Mitel became reliant on an overly complex internal infrastructure, with multiple email systems, multiple CRMs, etc. McBee, as the new CEO, found this intolerable. Clean-up efforts such as these are critical, but offer few direct benefits to customers other than the potential of a more streamlined and efficient operation.

The second goal speaks to Mitel's direction. The vast majority of Mitel's research and development spend moving forward will be on MCD and its related applications. The 5000 CP and SX-200 ICP are now deemed as mature products. There are no plans to retire these products as they continue to sell well, but don't expect major future enhancements. The 3000 will likely disappear in most markets, but the BT variant in the UK (known as the 3250) performs well. Mitel's future is MCD, and based on the company's historical engineering prowess, this laser focus will likely create significant future improvements.

Simplifying the business means different things to different people. Mitel's product licensing is very complex, but simplifying it does not appear to be included in this initiative. One quick look at the price list and it becomes pretty clear that Mitel makes UC about as complex as possible in terms of part numbers and licenses. To be fair, this complexity is the direct result of a highly versatile platform—but one that complicates product mastery for customers and channel partners. Additionally, the fact that Mitel is in three separate businesses—communications software, network services and distribution—does not appear to be on the table either. DataNet/Commsource and NetSolutions contribute profit, but the three businesses together still seem a lot like three businesses.

The third point has two major components: eliminating channel conflict and expanding the capabilities of its indirect channel. The company took swift action regarding channel conflict. It has ceased direct sales to new customers and closed 16 of its direct sales offices in the US; another 16 are being upgraded to "Centers of Excellence" to better support channel sales. There were overall reductions in sales staffing, and those remaining are now largely under quota to drive business to Mitel channel partners. Mitel does continue to sell direct to some pre-existing direct customers, but many of these accounts have also been transitioned to the channel. Additionally, Mitel ramped up its channel recruitment effort to target more IT-savvy dealers, ideally with VMware credentials.

The final point is fairly obvious: Sell what you've got—and Mitel has competitive strength in virtualization and mobility. The company has tuned its messaging around these themes at events and webinars. Together, the 3+1 initiatives make a lot of sense, and of equal importance, provide an improved level of clear direction for the

company. Successful implementation of 3+1 will put Mitel in an improved position. This is marred only by the fact that it appears Mitel would have been far better off had it not completed the costly merger with Inter-Tel.

The second and third initiative can be somewhat summarized with “undo the merger.” When Mitel acquired Inter-Tel, the primary assets obtained were:

- The 5000 and 3000 product lines
- A network of direct sales offices
- Sales management
- A new dealer network
- NetSolutions
- DataNet/Commsource
- Internal distribution operation

Of course, there was also value in eliminating a competitor. When it is all said and done, the acquired assets that will likely remain important in the future Mitel are DataNet/Commsource, NetSolutions and internal distribution. The two business units offer zero to no competitive benefit to Mitel Communications Solutions today. Internal distribution is either neutral or negative. The retained margin contributes to profitability, but the lack of a major distributor hinders channel expansion efforts.

Mitel will likely be successful with its 3+1 effort largely because it is so clearly communicated. McBee seems highly focused. A year ago, Mitel offered five platforms (3000, 5000, 200-ICP, MCD) and attempted to sell them all to very small and very large businesses. McBee is narrowing that scope to something achievable—promoting two platforms to the 100-to-2,500-user market, and directing the SX-200-ICP to hotels.

Channel

Mitel is working to strengthen its channel. In theory, this effort should expand its sales capability, but should not negatively impact existing customers. If Mitel succeeds, customers should appreciate the outcome of having more dealer choices.

Mitel is a radically different company than it was a decade ago. Then, it was focused primarily on TDM solutions with strong vertical penetration in hospitality. Over the years, Mitel invested heavily in new technologies; the journey from TDM to UC is not trivial; and the past several years have been under tough economic times. Mitel funded these changes with outside investment and an IPO. These were not options for a significant portion of its channel. The story is not unique—many of the TDM voice manufacturers face the same situation.

Mitel has it a bit worse partly because it created conflict within the channel, and partly because its brand is not associated with IT. Mitel attempted to create go-to-market partnerships with Microsoft, Oracle/Sun and IBM, but not all of those panned out as planned. The company appears to be gaining traction now with VMware. What is promising is that Mitel is acutely aware of the problem and is focusing and prioritizing its channel development.

CEBP

Mitel has a rich set of telephony-oriented interfaces and APIs for third-party products, but they could be updated and expanded. Opening up MCD and UC Advanced to richer WOA, REST and JSON technologies could position Mitel for more IT-centric opportunities. This approach would better align with Mitel’s current efforts to court the CIO as an IT rather than telephony solution.

Marketing

Over the past decade, Mitel has re-invented itself, but the general IT community has yet to hear about it. For those familiar with Mitel, it has a solid reputation as an innovative engineering-driven company. Not surprisingly, its newest general manager, Ron Wellard, was promoted from product engineering. Unfortunately for Mitel, audiences unfamiliar with the company represent a larger group. The company has historically spent very little on marketing, including advertising and trade events. Mitel faces the very difficult task of increasing its brand awareness. The good news is that it has a very compelling story to tell, including its heritage, management, size, UC breadth and solution set around mobility and virtualization. This is a bigger problem in the US than in some of its foreign markets where it is better known. Mitel claims some branding success was achieved with its Freedom Bus Tour across the US. Mitel's near-term branding success, be it via verticals, partners or even advertising, will be critical to its market penetration and success. The company does plan a return to industry conferences and a major website redesign.

Partnering

Mitel needs a strong best-of-breed partner to open IT doors. Its attempts to create this with Microsoft, Oracle/Sun and IBM all fizzled. Its relationship with RIM has likely passed its peak in terms of business potential. The VMware arrangement is working nicely, but VMware is not a particularly vocal partner. Mitel could benefit from more go-to-market partner relationships. New strategic relationships might be possible in the areas of social networking, CRM or mobility.

For Customers

Organizations planning to implement Mitel MCD should consider including the following within the implementation scope to maximize and optimize the product's capabilities.

Trojan Horse

The unique architecture of MCD allows the product to be cost effectively configured as a point solution without call processing. Organizations not looking to replace existing telephony systems, but considering a SIP gateway, an improved solution for teleworking, a mobility gateway, etc., could do so with MCD at a highly reasonable price. If MCD were set up solely as a SIP gateway, for example, the customer could also activate a la carte licenses to create anything from a mobility gateway to a teleworker solution (networked to existing PBX) or even a contact center server.

Mitel has presented this strategy as a way to leverage a Nortel investment. Rather than replace the system, MCD can be used to VoIP-enable it and extend features such as smartphone integration and teleworking to a TDM infrastructure. It is a clever angle, and could be applied to a far larger audience than just Nortel customers.

Use SIP Trunks

Equipment that does not support SIP requires gateways and TDM hardware on telephone systems. Most brands now support at least some SIP trunks. If a gateway is needed, consider MBG (MCD configured as a gateway). Check with the dealer for a current list of supported SIP providers. MBG is a gateway (acts like a gateway, priced like a gateway) that can grow into a full-blown implementation of MCD. There is a good chance MBG will eliminate a separate need for an SBC. Mitel does require SIP trunk licenses for each active SIP trunk.

Virtualize

One of MCD's key strengths is its virtualization support with VMware. Even smaller organizations could benefit from VMware, as it could simplify disaster recovery planning. Users that prefer the appliance still could find vMCD a cost-effective failover solution. Heavy users of VMware should leverage the tight integration between MCD and vCenter management tools. MCD does not require dedicated hardware with vSphere.

Mobility

Mitel has a full list of mobility features, and all, not some, should be given serious consideration. Dynamic Extension does not require a Mitel phone at all. The administrator can assign an extension number to a cell phone or any phone with Dynamic Extension and grant that user a variety of basic call manager features. Teleworker allows a Mitel phone to work in a remote location as if it were in the office. This means all the lights, features, even internal dialing work the same at the remote location. The phone may be more costly than a softphone client, but teleworker phones are more foolproof—they work (with DHCP) simply and the same as at the office, so no (or very little) user training is required. Hot desking makes sense if the organization has more people than desktops or phones. It is also good to place phones capable of hot desking in or near conference rooms and training facilities. The softphone clients are very rich, particularly with RIM MVS integration. At the time of this writing, Mitel is one of only two vendors that have tightly integrated with MVS. UC Advanced is recommended for all knowledge workers and can effectively replace the need for a softphone client or teleworker for some mobile users.

Mitel IP Phones

Mitel proprietary IP phones are recommended over SIP phones as they have tighter integration. Mitel offers a wide range of phones. Consider the 5330 which supports add-on modules such as LIM and cordless options for headsets or handsets. The cordless options do not require a handset lifter. Most Mitel phones also support wideband (HD) audio. For those that still count button keys, note that Mitel supports multiple screen pages of button programming, and MCD self labels the keys. MCD automatically updates the software on Mitel phones when appropriate. The Mitel DECT phones (ASCOM) are also tightly integrated. The user experience with these phones will be higher than with standards-based SIP phones as SIP standards for endpoints do not address displayed content.

Exchange for Messaging

In addition to MCD's built-in (embedded) messaging and its NuPoint offers, MCD also can use Exchange as its message store. MCD provides the telephone user interface (TUI) for those accessing messages from a phone. This has reduced overall messaging functionality, but eliminates the need for an additional messaging server.

Centralization

Mitel offers an implementation of its 3300 ICP and MCD called the Survivable Branch Office. This allows a remote office to be centrally managed under a single MCD implementation, but failover to local hardware (and backup trunks) should the data center or WAN link fail. This architecture is not unique, but the entire solution under one brand is rare. Connect branch offices to the data center over the data WAN—ideally, via MPLS networking. "Local" numbers can be homed in the data center for each location. The result is reduced hardware and maintenance with a local appearance, with economy-of-scale savings in both administration and trunking.

Also consider the Mitel AnyWare solution for branch offices. It is not on the price list, so it requires a custom engineered price—but Mitel does support this. Effectively, it enables abbreviated dialing enterprise-wide and creates a hybrid cloud/premises model.

VDI

Organizations heavily into virtualization may also be considering virtualized desktop Infrastructure (VDI). Mitel recently announced its softphones are now supported with VMware View. This makes Mitel the first company to support virtualized desktops with View. As an added bonus, single sign-on (via VMware and hot desking) is also supported.

Purchasing

Where to Buy

Effective in 2011, Mitel no longer sells directly to new customers in the US. With the exception of selected direct accounts that were retained, Mitel products are purchased indirectly through its dealer network worldwide. Members of Mitel's direct sales organization were either let go or re-missioned in a new corporate "Direct Touch" prospecting group. This group of approximately 60 people targets accounts larger than 100 extensions. This approach is more consistent with general industry practices and Mitel's international model.

To find a dealer, Mitel offers a dealer locator service on its website, under Partners > PARTNERlocator (requires Internet Explorer). The utility is not particularly useful, but interestingly, it offers assistance for any world region. For US users, it offers a statewide list of dealers but does not designate product competencies other than its "partner level," which is unexplained (as in the difference between a Platinum Plus and a Diamond dealer). It does prominently distinguish Exclusive dealers.

Dealer exclusivity is a current trend among vendors—it rewards dealers for not offering competitive products. The practice is widespread, with obvious benefits to the manufacturer. The benefits to end users are less clear, and therefore exclusivity is often hidden or played down.

Mitel is in the process of changing its dealer designations. The historical models of Silver, Gold, Platinum for Mitel and Gold, Platinum, Diamond for Inter-Tel were largely based on sales performance. The details of Mitel's new model were not published at time of writing; however, Mitel claims the new program will align more closely with its recently unveiled TAP, or Technical Accreditation Program.

The concept behind TAP is a formal acknowledgement that UC is more often than not a multi-vendor implementation. The vast majority of UC vendors insist on addressing this fact with more internal certifications, fighting fire with gasoline. Mitel took a more enlightened approach and created four TAP competencies, each involving non-Mitel certifications. The four are:

- Virtualized Voice Specialist
- Mobility Specialist
- Unified Communications Specialist
- Contact Center Specialist

The designations involve multiple certifications, both technical and sales oriented, involving Mitel products along with complementary vendors. For example, the Virtualized Voice Specialist requires several core certifications from Mitel and VMware, as well as networking certifications from Extreme, Cisco or Juniper. The Mobility Specialist involves a certification on RIM's MVS platform. Customers should look for these designations as appropriate to their implementation. Mitel intends to list TAP credentials with its dealer locator service, but has not done so yet.

It should also be noted that Mitel has removed geographic limitations on its dealers. There are other limiting considerations, and not all dealers will compete in any location—but keep in mind that non-local dealers may be an option. If the proposed deployment involves a specialized skill set with specific products or verticals, a specialized dealer, even if it is not local, could make sense.

Purchasing Considerations

Once a dealer is selected, consider the following configuration suggestions. The majority are associated with MCD. These topics are suggestions for conversation with the dealer. Each implementation is inherently unique. There are no universal answers.

User Licenses

MCD requires a “user” license for each user on the system. User licenses are portable between the various MCD implementation types (appliance, server or virtual). This provides users the flexibility to change server implementation as requirements change. Organizations should not implement vMCD if the virtual data center or IT staff is not yet ready. Start with an appliance or dedicated server and move to virtual implementation when ready, and simply re-use the user licenses.

MVS Integration

If the organization in question is using RIM Blackberry mobile smartphones, integrate MCD with MVS. Neither Apple nor Android offers this level of integration. Also enable the Blackberry device to natively emulate a Mitel extension, including abbreviated dialing and outbound MCD calls without a ring-back.

Device Licenses

Mitel previously charged a “device” license associated with each endpoint connected to MCD. The device license was eliminated in 2010, so Mitel no longer charges a fee to add phones to the MCD solution—only to add “users.” A phone without a user license is capable of dialing zero or 911, or being used for hot desking, where a user logs in to a phone to make it their phone. This means an organization can purchase user licenses for the number of concurrent users, instead of the number of phones. Each staff member who returns and logs in (hot desks) on a phone consumes one user license until logout. It is common for dealers to quote the same number of user licenses as phones.

Enterprise or Standard Licensing

MCD can be licensed either way. The key difference between enterprise and standard licensing is associated with the number of servers. Enterprise licenses cover more than one server. A resilient server (hot standby) is considered a secondary server, as are additional virtualized instances. If plans include resiliency, consider enterprise licensing even if only one “production server” is planned.

Contact Center

MCD offers two contact center solutions, Mitel Contact Center Solutions and Customer Service Manager. Generally speaking, Contact Center Solutions is more sophisticated and attractive for larger contact centers. For smaller organizations, such as an internal Help Desk, Customer Service Manager is simpler and more appropriate. The limitation of Customer Service Manager is it can only report on a single node/server. A lighter version of Customer Service Manager is called the Business Dashboard and may be attractive in less formal or non-ACD (round robin) environments. It is popular with 5000 CP users.

Phones

Consider the Mitel 5320 as the primary workhorse phone. It offers the strongest value, HD audio (wideband audio), full duplex speaker phone and eight programmable keys. It is priced even cheaper than Mitel's digital paper label phones. The next step up, the Mitel 5330, includes a backlit display and support for expansion modules. The modules are recommended for users that require GB networking or wireless handsets or headsets.

Software Assurance

All VoIP systems involve software assurance. Although technically not required, life rapidly becomes difficult without it (industry-wide). Software assurance includes upgrades and bug fixes, and the dealer can't get factory support for the system without it. Generally speaking, it makes sense to take advantage of multi-year discounts on software assurance, especially if the system is being leased. The user then can not only lock in the price (which generally goes up), but get a discount for doing so.

Trunking

Mitel offers trunking gateway bundles that include trunking and compression licenses. Only consider these bundles if compression is required—typically for overseas connections. Otherwise, just purchase trunk licensing (SIP or PRI/T1) separately.

UC Advanced

If implementing UC Advanced, note that it does not need to be implemented for all users. One of the key benefits of UC Advanced is the inclusion of the softphone, and for some users that's all that is needed. In that situation, consider a combination of UC Advanced and UC-X (softphone) licenses. Also, the UC Advanced client allows external phones to be designated as the primary phone. A remote employee could access features such as click-to-dial without a Mitel phone. Consider which remote worker solution is the best fit: the UC Advanced with a cell phone, home phone, etc., or the Mitel Teleworker that uses a remote Mitel IP phone.

Dynamic Extension

This MCD feature provides call control to external phones such as a home phone or cell phone. The user does not actually need a Mitel phone to use this feature. Consider not purchasing Mitel phones for outside staff; instead, use Dynamic Extension and hot desking. On MCD, Dynamic Extension is licensed per user, but on the 5000 it is a system wide option. This feature makes the 5000 very attractive for a small business with a proportionally large outside or mobile team (i.e., a car dealership).

SBC

Mitel offers the Mitel Border Gateway (MBG) as a trunking server. When evaluating the MBG, consider that it will likely replace the need for a third-party session border controller (SBC). Also, the Mitel Teleworker solution requires the MBG role. Teleworker is licensed per user, so once the MBG is in place, the incremental cost of adding Teleworkers is fairly minor.

Voice Mail

MCD has several Mitel choices for voice mail: Embedded, NuPoint, and MAS with NuPoint. In most situations, the standalone NuPoint makes little sense. The embedded voice mail is limited and ideally suited for small environments (<75). NuPoint standalone is attractive to larger organizations that are not likely to use any other applications than voice mail (i.e., hotels). Users that set up MAS can activate licenses for NuPoint and/or several other applications. NuPoint has a voice mail feature called Call Director (not to be confused with Mitel Communications Director or MCD), which enables outgoing greetings with a menu of options (such as “press 1 to ring my cell phone”). This Call Director feature is an extra add-on with the standalone NuPoint, but is included with MAS NuPoint. Additionally, the MAS server (along with NuPoint) can be virtualized. In other words, seriously consider NuPoint on MAS.

Reference Accounts

Mitel publishes numerous case studies in text and video on its website. The reference accounts indicate a widespread set of demographics and verticals including health care, hospitality (hotels and cruise ships) and education.

Mitel 5000 CP

Builders' Hardware, a large privately held architectural distribution company, uses the Mitel 5000 CP to network its offices in Pennsylvania and Ohio, and to extend UC applications to staff located in the office, at home and on the road.

Fencepost Productions, a clothing distributor in Missouri, uses the 5000 CP with Dynamic Extension, Teleworking and “Meet Me” conferencing. This client relies heavily on Teleworking and makes use of the LIM module available for some IP phones.

Packaging Incorporated, a 50-person packaging and supply company operating in three states, uses the 5000 CP and the Mitel Application Suite, hosting NuPoint UM and Mitel Collaboration Advanced. This implementation highlights presence and conferencing capabilities.

Mitel MCD

Auchan, a large retailer in France, uses MCD running on 176 3300 ICP controllers supporting 35,000 VoIP extensions, of which 10,000 are IP-DECT wireless handsets. Solution includes 15 call centers running Mitel Customer Interaction Solutions.

Chicago Bears supports 150 users at its offices, training facility and across Soldier Field. The MCD solution includes heavy use of Dynamic Extension and hot desking on a 3300 ICP controller. Implementation includes UC Advanced and a Mitel Contact Center Solution.

Hancock Estabrook, LLP selected MCD, UC Advanced, Collaboration Advanced and Teleworker for its 60 users in upstate New York. The firm also makes heavy use of Dynamic Extension and has integrated with RIM’s MVS to maximize integration with smartphones.

Marriott uses Mitel in many of its hotels around the world, typically with analog guest room extensions. In June 2011, Mitel announced that the **JW Marriott Indianapolis**, a “premier” convention center property, would become all IP. The facility has 33 floors, more than 1,000 guest rooms and a 104,000-square-foot convention facility. The implementation includes a contact center, in-building mobility and a variety of IP phone models.

Measurement Incorporated, a provider of testing and certification services, uses vMCD, vMAS, vCC, vMBG and vUCA. This customer specifically switched to Mitel because of its commitment to virtualized systems and management tools. The solution is configured for high availability among multiple VMware instances.

Spalding University, a four-year institution in Kentucky, uses MCD in its VMware vSphere environment. The entire virtualized environment is designed for high availability. The university was already using a Mitel 3300 ICP and now uses a virtual implementation of MCD running in an off-campus data center for increased availability. The implementation also uses MAS, NuPoint UM, Mitel Speech Auto Attendant, UC Mobile, MCA and MBG.

Other known Mitel customers include Deloitte Touche around the globe, Kohl’s department stores, the British Foreign and Commonwealth Office (UK), the Chicago and New York City public school districts, Norwegian Cruise Lines, the Hotel Palace in Madrid, Hotel J in Stockholm, and the New York Mandarin Hotel.

Appendix A: Mitel Company Information

Timeline

- 1973 Mitel is founded
- 1976 Expands into semiconductors with acquisition of Siltex
- 1981 Reaches \$100 million in annual revenue
- 1985 British Telecom obtains controlling interest in Mitel. Subsequently exits equipment and sells its shares to Schroeder Ventures.
- 2001 Terry Matthews returns. Mitel is split; Matthews takes the PBX division private and renames it Mitel Networks. The remaining semiconductor division is renamed Zarlink.
- 2001 Mitel launches 3300 ICP VoIP PBX
- 2001 Mitel acquires E-Smith (to become AMC)
- 2002 Mitel Networks splits out its manufacturing division, known as BreconRidge
- 2006 Microsoft places Mitel 3300 ICPs in all of its Technology Centers worldwide
- 2007 Mitel acquires Inter-Tel
- 2009 3300 ICP unbundled; software only made available (MCD)
- 2010 (April) IPO (MITL-NASDAQ)
- 2010 Mitel AnyWare launches—hosted voice
- 2011 Rich McBee joins as CEO
- 2011 Mitel and VMware offer first scalable softphone for VDI
- 2011 Mitel MCD Release 5.0 GA

Organization

Mitel Communication Solutions

Mitel Communications Solutions is the division generally known as Mitel. It provides unified communications platforms in both hardware and software forms. The company positions its solutions as best-of-breed options that leverage its nearly 40-year telephony heritage and reputation. The company's key strategy is to exploit and extend its competitive advantages in virtualization and mobility.

Mitel's systems scale to very large implementations (up to 65,000 endpoints), but the company's historical success is in the mid-market and SMB sectors. Mitel's complete solution involves a Mitel calling platform, branded desktop devices and various optional applications. Mitel Networks' other units offer complementary solutions such as Mitel-branded network services including cellular. MCS serves multiple vertical sectors, including education, government, health care, hospitality and retail in the United States and abroad.

NetSolutions

Mitel Networks might be the only UC equipment and software provider that offers a branded network/carrier service. NetSolutions offers Mitel carrier services including simple SIP trunks, managed MPLS switched networks and even cellular services. This is possible through wholesale relationships with carriers; NetSolutions does not lay cable.

The key customer benefit is verified compatibility with Mitel products and streamlined invoicing (as opposed to multiple carriers). The services are competitive, but are rarely the low cost option. The company's network services are offered primarily in the United States and some international markets. Mitel is licensed as a competitive local exchange carrier (CLEC) in 44 states. NetSolutions offers:

- Local access services
- Mobile voice and data services
- SIP trunks
- Mobile smartphones
- MPLS networking
- Hosted offerings
- Hosted voice (Mitel AnyWare)
- Network monitoring and management
- Audio conferencing
- Web conferencing
- Hosted secure Internet access
- Long distance services

NetSolutions caters primarily to the customers and dealers of Mitel Communications. Mitel Communications, however, keeps NetSolutions at an arm's length because many of its channel partners compete directly or offer competitive services. NetSolutions sells directly to end users and works with non Mitel dealers.

DataNet/CommSource

DataNet/CommSource represents two distributors wrapped into one. The two divisions were separately acquired by Inter-Tel and then both later acquired by Mitel. Mitel CommSource distributes telephony-related third-party products. Mitel DataNet distributes data-related products. (Literally, the division has separate line cards and sales staff associated with each division. Why the company has not consolidated into a single brand is a mystery.) The unit is a traditional two-tier distributor offering a portfolio of products that complement Mitel's core solutions including servers, cabling, wireless solutions, storage area networks (SANs) and other items. The division sells through Mitel dealers and Mitel offices, currently throughout North and Latin America.

Current Management

After the IPO, CEO Don Smith announced his retirement. Subsequently, President Paul Butcher departed, ending nearly a 10-year span when the two ran the company. CEO Rich McBee was hired in January 2011 and began publicly announcing changes in May 2011. At that time, the Mitel Communications Director (MCD) and to a lesser degree Inter-Tel's 5000 were reinforced as the company's primary strategic platforms. Most of Mitel's applications and endpoints now work with both systems.

Richard McBee, CEO



Rich McBee was named Chief Executive Officer effective January 17, 2011. He brings to Mitel more than 20 years of experience in telecommunications, most recently as President of the Communications and Enterprise Group of Danaher. He got to Danaher when it acquired Tektronix in 2007, where McBee held a variety of positions over 15 years including Senior Vice President and General Manager, Communications Business Unit. McBee holds a Master's Degree in Business Administration from the Chapman School of Business and Economics and graduated from the United States Air Force Academy with a Bachelor of Science degree in 1986.

Steve Spooner, CFO



Steve Spooner joined in June 2003 as CFO and has more than 25 years of financial, administrative and operational experience in high technology and telecommunications. Spooner has worked for 23-plus years in the high-tech and telecommunications sector. He brings a wealth of experience in corporate finance and strategic business planning to Mitel. Prior to Mitel, Spooner was Chief Executive Officer of privately held Stream Intelligent Networks Corp. During his time as CEO, Spooner led the company to substantial growth during a recessed telecom market, through focused activities in investor relations, corporate strategy and development, strategic alliances and marketing. Spooner sits on numerous strategic advisory boards and is an active board member of the Canadian Wireless Telecom Association (CWTA) as well as a former chairman of CWTA's fixed wireless committee. He is a Chartered Accountant and a Commerce graduate of Carleton University, Ottawa. Spooner also holds the ICD.D certification, having completed the Directors' Education Program of the Institute of Corporate Directors of Canada.

Terry Matthews, Chairman of the Board



Sir Terence H. Matthews, is co-founder and Chairman. Matthews has been a member of the board of directors since 2001 and had been involved previously with Mitel Corporation 1.0 (now Zarlink) for over 19 years. In 1972, he co-founded Mitel Corporation and served as its President until 1985 when British Telecommunications bought a controlling interest in the company. In 2001, companies controlled by Matthews purchased a controlling interest in Mitel Corporation's communications systems division and the "Mitel" trademarks to form Mitel. Between 1986 and 2000, Matthews founded Newbridge Networks Corporation and served as its Chief Executive Officer and Chairman. Matthews is also the founder and Chairman of Wesley Clover International Corporation, an investment group with offices in the United Kingdom and Canada with investments in telecommunications, real estate and leisure. In addition, Matthews is currently Chairman or serves on the board of directors of a number of high technology companies including March Networks Corporation, Bridgewater Systems Inc., CounterPath Corporation, TrueContext Corporation and DragonWave Inc. Matthews holds an honors degree in electronics from the University of Wales, Swansea and is a Fellow of the Institute of Electrical Engineers and of the Royal Academy of Engineering. He has

been awarded honorary doctorates by several universities, including the University of Wales, Glamorgan and Swansea, and Carleton University in Ottawa. In 1994, he was appointed an Officer of the Order of the British Empire, and in the Queen's Birthday Honours 2001, he was awarded a Knighthood.

Phil Keenan, EVP Americas Sales, Service and Field Marketing



Phil Keenan was appointed to the position in April 2011, and is responsible for Sales, Service and Field Marketing for the United States and Canada. He brings to Mitel over 25 years' global experience in Sales, Marketing and General Management in technology, predominantly in the unified communications industry. Keenan is responsible for the strategy and execution of Mitel's go to market in North America. Prior to joining Mitel, Keenan held senior positions at Nortel and Polycom. At Nortel he was responsible for establishing the Telepresence and Multimedia Services business. During his decade-long tenure at Polycom he was member of the executive management team where he held a variety of positions including Senior VP Strategy and Solutions Marketing, Senior VP Worldwide Sales, and Senior VP and General Manager for the Network Systems Division. He holds a Bachelor of Science from Cardiff University.

Ron Wellard, EVP and GM Mitel Communications Solutions



Ron G. Wellard joined Mitel in 2003 as VP of Research and Development and until recently held the position of EVP of Product Development and Operations. In May 2011, Wellard was appointed EVP and GM of Mitel Communications Solutions (MCS). He is responsible for the MCS business unit including Research and Development, Product Management, Marketing, Operations, Technical Support and Service. Wellard's experience spans Enterprise and Carrier/Service Provider portfolios. Wellard holds more than a dozen patents in varied areas of telecommunications and holds a Bachelor of Engineering degree from the University of Waterloo.

Ownership

Since 2010, Mitel has been a publicly traded company on NASDAQ (MITL). The company filed an IPO to pay off a significant portion of its debt associated with its 2007 Inter-Tel acquisition. As a result of the acquisition and IPO, the founder and Chairman of the Board reduced his ownership to about 23 percent. Francisco Partners, a San Francisco venture capital firm, owns about a third of Mitel and two board seats via Andrew Kowal and Benjamin Ball. Francisco Partners tends to invest in mature or maturing technology companies, typically in communications, hardware and information technology. The two largest institutional shareholders are Wellington Management Company (8.5 percent of outstanding shares) and Morgan Stanley (7.45 percent of outstanding shares) as of June 2011.

Two of three analysts (Merrill Lynch and Canaccord Genuity) monitoring MITL on StarMine give the company four out of five stars. The third analyst of JP Morgan rates it five out of five.

Appendix B: UC Market Overview

Business communications are in tremendous transition. For nearly a century, the PBX remained fiercely independent, with its own dedicated terminals, wiring, hosts and applications. It was a reasonably well-understood model. Products were similar, and innovation provided only brief advantages until competitors implemented the functionality. Market share was fairly easily grasped by counting the number of physical ports sold according to vendor-provided reports. Customers placed heavy emphasis on desktop phones as a key differentiator, and system prices and features were similar enough that side-by-side comparisons were manageable.

Recently, that easy-to-understand PBX model morphed into something a bit more nebulous, loosely referred to as unified communications. Around 2002, VoIP technology crept into the PBX, initially disguised as a transport alternative. One key benefit to VoIP was the notion of convergence, which at the time referred to running voice and data traffic over the same wires and cable infrastructure. The notion of convergence rippled through the industry—servers, applications, departmental organizations and the vendors themselves converged in unexpected ways. Concurrently, the tools of business communications greatly expanded from email and voice to include IM, SMS, social networking and numerous Internet-based services. The need to unify both communication tools and infrastructure became a priority.

The communication vendors responded to the opportunity with broadening portfolios and features that rapidly embraced multi-modal communications. The desktop computer became a hub for UC including presence/IM, unified messaging, call control features, and voice and video softphones. UC extended to mobile devices, particularly the smartphone with rich client capabilities. It's amazing, really: A proprietary dedicated phone is now being threatened and sometimes replaced with a client on a general-purpose mobile device that has its own call control. Rather than the "me too" innovation of the PBX era, UC vendors now seek unique value propositions. Solutions, both premises and services, vary far more now than in the PBX TDM realm.

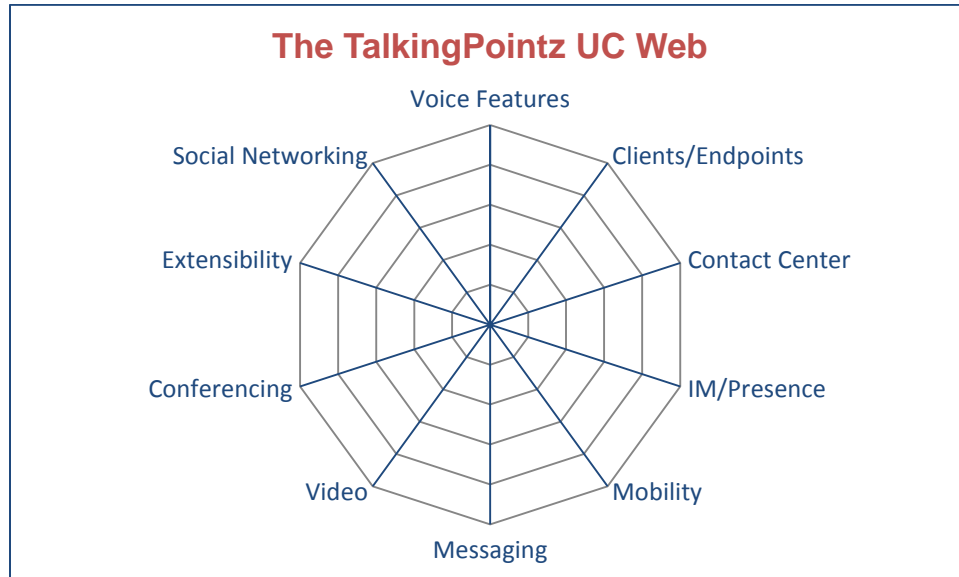
Additionally, over the past few years, solutions moved from hardware to software. Hardware-based models were foolproof in terms of capacity planning and repair. Capacity was met when systems ran out of ports; when something broke, the dealer replaced the part. Software-based solutions offer many benefits and a new realm of innovation, yet demand much more effort in planning and operations. A simple hard-drive replacement is no longer a matter of selecting a part, but could require expertise in the operating system and/or storage infrastructure. New features and capabilities are simply unlocked or licensed. Questions about operations and features are no longer simple "yes" or "no," but require a conversation. The presales buyer must constantly clarify the difference between "what's supported" and "what's proposed."

The TalkingPointz UC Web

UC represents more than voice communications, but exactly how broad is the subject of debate; few definitions agree. UC attempts to capture all forms of electronic business communications including voice, presence/IM, video, and tools that support collaboration and mobility. These tools' degree of integration, as well as the breadth of each offering, varies widely.

UC is effectively in the eye of the beholder. It's intended to be a comprehensive approach to the tools, media, and devices used in business communications. But not only is there no consistent answer to the question of what UC entails, but the menu keeps changing with every new iDevice. UC is different for each organization based on its needs and vision. Therefore, in its broadest sense, no single vendor provides a complete UC definition or solution. It is up to users to determine the scope of their UC strategy. Most strategies involve multiple vendors, services and technologies.

The TalkingPointz UC Web offers 10 key functional UC categories of communications. The web gives each spoke equal importance, but this will not be the case for most end-user organizations. As organizations identify various UC solutions on the web, areas of strength and weakness will be exposed. Aligning these areas with organizational priorities helps identify a match. Alternatively, this process could help an organization identify complementary partnerships in a multi-vendor approach to UC.



Voice: Voice is less important overall than it was a decade ago due to the increases in communication mode alternatives. Twenty years ago, the communications choices were generally either/or: a phone call or a physical letter. Today, we use email, social networking services, IM, even SMS, to name a few. However, voice remains critical and central to UC. Evaluate powerful call processing and routing features, integrated applications and independence from hardware. Features are tricky to evaluate: Because specific features invariably seem small and minor, the versatility of a large feature base is often important.

Clients/Endpoints: The desktop client and/or the physical endpoint device will largely determine the user’s experience and training needs. Organizations must evaluate the obvious—features and feature accessibility—but of increasing importance is the range of solutions. Issues to consider include client features, operating systems supported, Web-based feature sets, display sizes, power consumption, wireless options and standards compliance.

Contact Center: Plenty of specialized contact center solutions exist, but most organizations with modest requirements will utilize the call center component of the core telephony solution. Contact center feature sets vary greatly among solutions. Look for CTI/IVR tools, queuing and routing flexibility, speech recognition, outbound dialing, and specific tools, clients and displays optimized for agents and supervisors.

IM/Presence: Instant messaging and presence tremendously impact communications and productivity. Look for solutions that integrate status with the voice solution, calendar solution and/or mobile location. Some IM solutions can promote to voice and/or video sessions and back again rather than requiring separate applications. Directory synchronization and various controls over visibility of that information should be evaluated. Some systems integrate with existing directories, others create their own, and some

even allow searches based on skills or location. Presence and IM are rapidly changing business communications. Look for a robust solution, and pay particular attention to compatibility with external systems. IM interoperability is usually done in by some combination of public gateways, standards-based interfaces, or federation.

Mobility: Mobility is a very broad area and includes fixed remote users (teleworkers), wireless mobile workers (3G/4G/Wi-Fi) and corridor warriors (Wi-Fi, DECT) who require mobility at multiple or remote locations. Mobility solutions generally drive at either enabling portability or reducing costs (using Wi-Fi instead of voice minutes or roaming charges). Solutions involve mobile phones, clients for smartphones and tablets, hot desking or hoteling, fixed mobile convergence (FMC), UC desktop applications and softphones. This area is difficult to compare among vendors as they use similar terminology (“smartphone client”) to represent very different capabilities. It is also an area changing very quickly. Look for solutions around single-number management, and carefully evaluate the capabilities and supported platforms of mobile clients.

Messaging: Voice mail, email, auto attendant and fax (though fax is disappearing) are frequently addressed together in a messaging strategy. Most vendors support Microsoft’s Exchange and IBM’s Domino integration; some even utilize those products as a single store. The messaging component may also offer speech recognition and/or transcription. Look for synchronization features (so a message doesn’t have to be deleted more than once), use of popular codecs, visual messaging and transcription.

Videoconferencing: The popularity of Skype and other consumer services has set a higher expectation for video-based business communications. Most of the UC vendors now support limited webcam-type video calls between internal users. Many solutions also integrate with external sites, room systems and/or mobile devices. This is an area of wide disparity among solutions. Video systems, content management and conferencing collaboration systems overlap around shared documents.

Collaboration: Collaboration within the UC context generally refers to expanded conferencing. The solutions include several tools such as audio and/or videoconferencing, desktop sharing, push presentations/PowerPoint and whiteboarding sessions, all involving multiple simultaneous users. Collaboration tools are becoming increasingly important due to the rise of distributed workforces. Collaboration tools often, but not always, involve client software that must be distributed and upgraded. Evaluate resource management, calendaring systems and client ease of use. Look for tools that can be extended outside the organization to embrace partners. Collaboration in a purer context generally involves a content management system, shared workspaces and content portals.

Extensibility: CEBP, or Communications Enabled Business Processes, refers to integrating communications capabilities into business processes and applications. To do this requires technology interfaces, commonly known as application programming interfaces or APIs. Look for bi-directional API capabilities. For example, a telephony solution that can coordinate with a CRM could auto-populate calling records. A dispatch or reservation system could potentially interface with telephony to initiate outbound calling reminders. Look for both APIs and partner solutions that demonstrate an ability to integrate communications into other applications.

Social Networks: This area is the least mature of the UC components. Social networks are increasingly used for business communications, both as a direct communication among business partners as well as a method to monitor public conversations about a brand, product or service. Some contact center solutions integrate with public networks. Some vendors are now offering the ability to route calls based on social networking status updates and/or collect information (such as phone numbers) from social networks.

The above items are core UC component categories included in the TalkingPointz UC Web. The following topics include more specialized infrastructure directions that impact UC implementation designs and decisions.

Virtualization: IT departments are rapidly adopting virtualization technologies from VMware, Citrix and Microsoft for servers and desktops, and even mobile devices. Virtualizing real-time communications requires careful consideration and planning. Virtualization capabilities significantly vary among vendors. Verify that the UC solution when virtualized will still adhere to organizational objectives regarding resource planning, disaster recovery and management.

Consumerization: Social networks and personal computing devices such as smartphones and tablets have reduced the barriers between personal and professional lives. The rate of innovation taking place in the consumer or personal market is staggering—and it affects the way we work and the way we live. Individuals increasingly want to use consumer-class devices and services for their corporate tasks, including their own computers (at home), their own bandwidth and their own portable devices. While this is obviously financially attractive for business organizations, it introduces new complexities around support and the protection of employer assets (content, directories, phone numbers, etc.). Vendors and end users are striving to find the balance in price, security and capability. The bring-your-own-device (BYOD) model is rapidly emerging as a best practice, and forcing major changes to how an organization approaches support and security.

Cloud and Centralization: VoIP reduced the limitations imposed by geography, which then gave rise to the concept of hosted voice. Hosted voice offers several compelling benefits, including the elimination of infrastructure (equipment and administration) at each site and feature parity among users/locations. However, hosted voice does not necessarily equate to outsourcing. Many organizations are centralizing their UC solutions on or off premises—effectively self-hosting, or using a private cloud. Centralization typically results in all the UC services being centralized in a data center model. The only equipment at branches is for survivability or failover.

Security: UC security is not directly addressed in TalkingPointz UC reports. All major brands meet base corporate security requirements. However, security is not a check-box feature. Buyers should be aware that IP technology introduces numerous security aspects that were not relevant with TDM systems. VoIP technologies are susceptible to Internet threats such as DDoS attacks. Unified messaging makes it possible for voice mails to be forwarded to external users, and simultaneous ring/call forward means customers may end up on home and personal phones. A modern UC implementation should force changes to internal practices and policies as well as industry or federally mandated compliance-requirements. Users requiring advanced security considerations, such as JITC or specific encryption requirements, should discuss these with their dealer and/or manufacturer.

There is a tremendous amount of differentiation and specialization among industry players, and end users should not assume it's a Ford vs. Chevy situation anymore. The manufacturers are adopting different areas of focus and specialized value propositions. The available solutions in the marketplace today are incredibly powerful and, when appropriately matched and implemented, can offer significant communication capabilities and productivity boosts.

Market Share

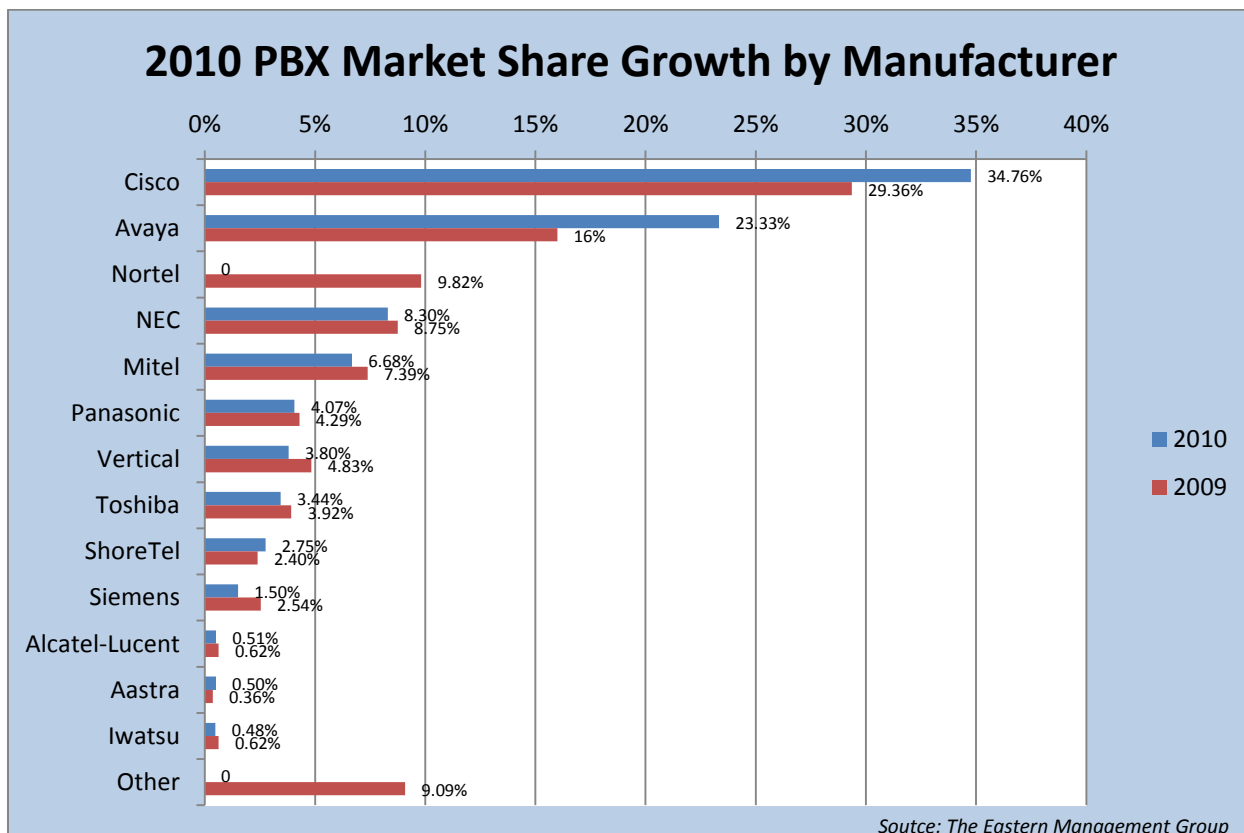
Measuring and comparing sales performance is not what it used to be. The major manufacturers don't agree exactly what Unified Communications includes. Research firms tend to count components such as licenses for voice, IM, video, etc., while vendors market "UC." Very few vendors are willing to use the term "PBX," as if the technology is evolution-proof. The result is PBX market share reports measure what the vendors insist they don't

make. Additionally, the notion of counting ports has become obsolete—a single Ethernet port can service thousands of users and trunks.

Market share reports are valuable, but not indisputable. Counting licenses isn't simple either, largely due to bundling and "free" apps/plugin downloads for the desktop and mobile. What each vendor includes in each license and what customers actually implement are different matters. Even "like" licenses vary. A Session Initiation Protocol (SIP) trunk, for example, could support one or 255 active calls per the standard. Counting telephones is equally difficult due to the introduction of software-based softphones, numerous extensions to one user (home phone, mobile client, etc.) and desktop clients that can be used with or without a desktop phone. Year-to-year revenue comparisons are ambiguous as the industry is gradually moving away from hardware. Then there is the whole notion of open-source software, which is frequently excluded in market share reports. Industry counting methods are struggling to adapt to a non-physical converged marketplace. Market share reports represent a best effort to ascertain trends, shifts and patterns in UC sales.

The table below shows market share information for the North American PBX line shipments in 2009 and 2010 as researched by The Eastern Management Group (reprinted with permission).³ 2010 line shipments showed overall year-over-year growth of 16 percent. Note, the data does not reflect the installed base, which is very difficult to measure.

The sales information includes both new systems and add-on sales to existing systems. Add-on sales showed an even higher annual growth of 18 percent. Software-based systems are easier to supplement and enhance with add-ons than their hardware predecessors, which were sized and licensed to accommodate a specific customer size.



³ Market research printed with permission of Eastern Management Group, <http://www.easternmanagement.com>.

UC Vendor Landscape

Note: This is not a comprehensive list, but rather seeks to provide a representative sampling of the leading companies in this space.

- **ADTRAN:** While known primarily as an infrastructure vendor, ADTRAN offers UC solutions within its NetVanta brand, a reasonably priced solution sold as a small business appliance or as software for larger implementations. ADTRAN also produces its own phones.
- **Aastra:** Aastra offers ClearSpan, which is a premises-based version of the BroadSoft technology typically sold only to service providers. As a result, its underlying technology has extensive deployment experience. Aastra also offers the MX-One mid-market platform. Aastra has strong penetration in higher education and with very large implementations. Its MX brand is better known in Europe.
- **Alcatel-Lucent (Genesys):** ALU offers its own OpenTouch Communication Suite as well as the Genesys Contact Center solution it acquired. OpenTouch is a fully unified and integrated UC suite. Very successful in Europe, ALU also offers a full range of networking solutions.
- **Avaya:** In 2010, Avaya merged with Nortel, creating a UC behemoth. Avaya's primary strategy centers on its Aura offering, which presents a slightly different twist on enterprise communications and places more emphasis on the session aspects rather than the transport element of SIP. The company has some very innovative products around video and mobility including its Desktop Video Device and its Flare experience.
- **Cisco:** Cisco offers its Unified Communications Manager (CallManager) products for SMB and enterprise customers. The 6000 and 5000 products share numerous applications and devices, and the 3000 is a far simpler product largely aimed as a TDM replacement solution.
- **Digium:** Digium is primarily known as the keeper of Asterisk, free open-source telephony software. Asterisk can be found in numerous commercial and supported offerings including Digium's own Switchvox solution which is positioned as a rich SMB UC solution.
- **Huawei Technologies:** This Chinese powerhouse is very strong in routers and switches and recently expanded into UC. The company is expanding its market presence, particularly via its telepresence solutions; however, it is not well known in the European or US markets.
- **IBM:** IBM offers Sametime to extend third-party calling solutions. Its approach hides the telecom platform, enabling a consistent approach regardless of the underlying telecom technology (premises or hosted). IBM's Sametime leverages IBM's strengths in messaging and social networking into a UC solution.
- **Interactive Intelligence:** Sold as both premises and a hosted solution, the company's Contact Center core has expanded to a larger UC offering. The solution includes a single intuitive desktop interface to manage incoming and outgoing calls, chats and emails. The same interface also equips users with real-time presence management controls, corporate and workgroup directories, and conferencing.
- **Microsoft/Lync:** Lync 2010 is geared toward larger enterprises (+250 users, but generally much larger). This may change with Lync Online (hosted). Lync takes a very different approach to UC than most competitors: It tightly integrates with other Microsoft products such as Exchange, Office and Windows. Lync successfully challenges a number of long-held assumptions and offers a unique and compelling experience, but with limited voice features and a more proprietary approach.
- **Mitel:** The Mitel Communications Director (MCD) platform is supported for a variety of implementations ranging from appliances to service provider multi-tenant solutions. The company is focusing its efforts around virtualization and mobile technologies. Mitel also offers smaller appliance solutions. It tends to do well in the less-than-2,500-user market size.
- **NEC:** With the purchase of Spherical technology in 2007, NEC added next-generation software-based communications to its appliance portfolio. The SV8000 platforms are a proven workhorse suitable for businesses of all sizes. Spherical and the SV8000 series offer broad UC applications.
- **ShoreTel:** ShoreTel's claim to fame is simplicity. The solution, sold as appliances, automates and simplifies

many complex tasks such as resiliency and propagation of distributed databases. The company has been successful in SMB, but aggressively growing into larger implementations.

- **Siemens-Enterprise Communications:** Siemens-Enterprise Communications is a separate company from Siemens AG. Its OpenScape platform, recently also available as a service, builds on a widely deployed IP PBX system and provides a rich set of UC features that go well beyond the desk phone. Siemens-Enterprise has its strongest market penetration in Europe.