Something to Rely On:
Why the Desktop Phone isn't Going Away

Introduction

The death of the desktop telephone has been predicted for decades. Technology has steadily advanced, business processes and communications needs have grown, and It's actually rather surprising how the "desktop phone," that stodgy old friend, has prospered. Look at its challenges: first, the PalmPilot, cellphone and the Blackberry, then on to Skype and other soft clients, unified information systems, mobile iOS, Windows and Android devices, teleworking, personal video calling, open-air workspaces, multiple Unified Communications and Control (UC&C) platforms, and the internet itself. And, of course, an always-growing need for specialized applications and consistent, efficient globalization.

But yet, the desktop device remains firmly in place. What has actually happened is one of those things that many didn't see coming, yet is obvious in hindsight. The question was never really about when the desktop telephone would disappear, but rather how changing work needs and new technologies would shape its evolution.

"Personal transportation" did not disappear when Karl Benz introduced the Motorwagen in 1885, it evolved as technology moved beyond the horse. A broad range of personal transportation solutions emerged, from the motorbike to the motorhome, addressing such specific needs as the sedan, snowmobile, and all-terrain vehicle along the way. Similarly, the phone (which we might describe as a personal desktop live communications device) is not vanishing. It is, rather, becoming even more critical to business success, as it has advanced from its roots. Once merely the "black phone on a desk," there is now a range of devices to cover an assortment of user needs from a basic SIP desktop telephone to the rich integration of essential capabilities known as the Business Media Phone.

What is a phone today?

The modern business phone exists in many forms, but the most basic requirements they all share are durability and reliability. They are always on, ready to be used, unlike cell phones that require batteries to be charged and wireless connectivity. Similarly soft clients or UC clients running on PC's must be running to accept calls or place calls. A phone is one thing we expect to always work; that is why they have traditionally been built like "brick houses," never knowing who might slam down the handset, douse them with tea or drop them off of a tall table. Any phone is designed for a tightly defined set of uses, and performs those flawlessly. Whether a particular phone today supports only voice or a full bouquet of functions and applications, it is expected to do those jobs with unblinking confidence. As we will see, any device that might hope to take its place must be measured against this simple but essential standard of absolute reliability and responsiveness, one which we might call the "phone's prime directive."

Beyond this, major leaps in technology allow business phones to serve a rapidly growing range of needs. The adaptations to serve these can be broadly categorized in three directions— extensibility, unification, and media. Manageability and reliability—looking at the centralized support model removes the hassles from the end-user who can simply use it and doesn't have to worry about software updates or configurations.

Extensibility

Whether PSTN, SIP, or some proprietary network, the most basic analog phone needs only a handset and a phone cable. The underlying vision usually supports a much larger assortment of abilities, though, and different models within the same family will express different combinations. These can take the form of additional interfaces to support Bluetooth, wired, and DECT headsets, memory stick hosting to preserve conference audio, additional Ethernet jacks, "sidecar" accessories to provide one-touch selection of additional lines, and even add-on interactive HD video. Each of these extends the usefulness of a phone, by enabling future enhancement without burdening the initial purchase. The extent to which a phone can support this kind of evolution is one measure of its suitability for an organization.

Unification

Although the range of abilities, environments, and platforms that might be supported by a contemporary phone is much broader than it was just a few years ago, the user still expects them to work together simply and reliably. This means that functions must tie together transparently, and any complexity has to be neatly and efficiently concealed. The functions performed by the desktop phone must be able to connect to a wider set of networks; but more than that, the user's experience has to remain consistent—a user cannot be confronted with wildly different behavior just because, for example, SIP dialing and the Microsoft Lync platform are both in use within the organization. For this reason, one essential requirement of a properly-implemented phone is that it retains compatibility with existing infrastructure. This means that interoperability among different UC and UC&C host platforms and simple, predictable behavior are essential for a successful phone, whether it is a basic voice phone with enterprise directory access, or a full-fledged Business Media Phone.

Media

Today, a conversation can happen among almost any combination of styles and environments—HD or narrowband voice, accompanying charts and presentations, HD video, small-screen video from a handheld device, or even Immersive Telepresence rooms. A conversation can be between two people in only two places, or among a gathering of groups and individuals everywhere—at airports, desks, homes, workspaces and conference rooms.

Although there is today a growing expectation that participants will join meetings with video, a phone must give its user a clear perception of the meeting and also present its user as a competent, efficient participant in that meeting, whether the user has joined with video or only audio. This means that whether it sits in an open space or a quiet office, a phone must reject surrounding noise while letting its user speak clearly. Further, if it is video capable, it must send a clear, high-fidelity image even if its own display is compact. Just as a user does not want to sound like they're on a muffled cellphone, they also want to look as if they're working from a professional HD video system, not shaking and blurry with a precariously-mounted camera.

The many flavors of desktop phones

With all of the possible variations, there are some combinations that have become especially popular.

Voice

The traditional voice-only phone still has a strong following because, by incorporating HD voice, that is almost mandatory these days, it provides excellent communication at an attractive price. If an organization is confident that video will never be needed by that user, as might be the case in a retail or warehouse application, a basic IP phone with HD voice, such as the Polycom® VVX® 300 and VVX® 400 series, can be an excellent solution.

Reception

Taking advantage of "sidecar" extensibility, one or many graphic modules that provide fast, one-button line access can transform an otherwise conventional phone into a well-tuned reception desk or operator instrument.

Business Media Phone

The desktop configuration offers a hardy platform from which to host a high-performance personal video connection. "Videophone," a phone with video as well as audio, was once the concept of what a video-capable endpoint would be, but what has really happened goes far beyond that—the Business Media Phone. which integrates full audio and video capabilities with a rich UC&C implementation, application hosting, and multi-network compatibility. It retains the compact desk-friendly footprint and power-efficient design of its predecessors, but demonstrates all three characteristics described above can be achieved—extensibility, unification, and robust, full-fidelity media.

A good Business Media Phone will be built with a new generation architecture, one that combines multiple powerful processing cores, specialized media processing, graphical interfaces, high-performance network communications, and embedded facilities to customize and extend the functions and performance of the Business Media Phone itself. The importance of such a design is indicated by the fact that every major supplier today has one or more models in this category.

Figure 1. A modern Business Media Phone, the Polycom VVX 600

Polycom® VVX® 600 features

- Traditional tactile keypad
- Video and graphic display
- Gesture-based high resolution touch screen
- HD voice handset
- Live video with camera
- Compatibilty with exisiting infrastructure
- Powerful multi-core engine
- Efficient power management
- Extended interfaces for audio, data, communications and video
- App hosting with open API
- Polycom® HD Voice™ speakerphone

To illustrate what this Business Media Phone concept means in a real device, let's take a look at one representative of Polycom's Business Media Phone product line, Polycom® VVX® 600.

While it supports the enhanced mission of the global business, the Polycom® VVX® line of Business Media Phones does not abandon the most important features of a telephone. Important elements are retained and enhanced—a telephone handset offers privacy and comfort while adding high-definition audio (Polycom® HD Voice™), a full-size tactile keypad adds interactivity that augments its utility but can still invite an untrained user to be immediately productive with a familiar, secure instrument.

The added functionality of a Business Media Phone can burden an IT organization if not carried through completely, but Polycom's Business Media Phones are a good example of how to preserve ease of configuration while increasing capability. The Polycom VVX family incorporates Zero Touch Provisioning, which includes a web-based configuration tool that makes all of Polycom's phones—from basic voice-only to high-end Business Media Phone—simple to deploy, administer, upgrade, and maintain. This is true in both open and proprietary installations, whether existing or new. An added beneficiary of this focus on user-friendly implementation is Polycom VVX's tight integration with the popular Microsoft® Lync® platform, offering transparent connection to both Lync and more traditional SIP domains. Throughout Polycom's VVX series, full Lync contact management and presence are cleanly blended with mainstream video and audio telephony, forming a hugely empowering combination.

Bring your own distraction—the BYOD myth

There's an "elephant in the room" some places where the next generation of communication devices is discussed these days—the supposition that personal computers running phone emulation software ("soft clients"), and cordless battery-powered smartphones and tablet devices, will replace the desktop phone. Let's shine some light on this overburdened beast.

The "Bring Your Own Device" or BYOD idea usually means depending on an employee's personal smartphone or tablet device for corporate mail, messaging, and phone. This can look like a thrifty move at first, especially since enterprises often make an exception and allow this kind of use while traveling already. But making the exception into the rule by re-defining the smartphone as the "only phone" is a bad idea. While the handheld can be adequate for monitoring email while jumping between bus and airplane, it's a poor compromise as a telephone, and one lost sale from a botched call makes any "cost" comparison moot.

A professional desktop communications device is designed to meet a very different set of needs from those for a generic PC or smartphone. While a tablet or laptop can be made to imitate some of the things a real phone does, that is not its primary goal. Let's look at a few of these differences.

A BYOD is built for fast obsolescence

The average life of a mobile BYOD today is 21.7 months[1], less than two years. Each new BYOD version may bring some cool new feature, but it also means identifying new incompatibilities,

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1. *http://myphonemd.net/blog/2012/07/16/why-your-new-smartphone-is-already-obsolete/*

updating software versions, changing policies, recertifying applications and procedures, retraining users, and lots of wasted time for users and for IT.

Wireless isn't made for two-way conferencing

Most BYOD's can only connect via a wireless network. Unfortunately, beyond narrowband phone calls, wireless networks are not built for the mass deployment of two-way media like video and audio calling. They're optimized for transferring data files and downloading movies. Live media is more demanding of data integrity and latency control, which often results in unpredictable dropouts and freezes over wireless connections.

A smartphone has to be small and cheap

A deskphone is assigned a reasonable amount of space, but the handheld's priority is size. Every component is shrunk to the minimum in an industry largely defined by "my smartphone is thinner than yours." Speakers are weak, sound pickup undirected, cameras are shaky, and batteries run down before the work is done.

Soft clients crash

Soft clients share cores, memory, I/O, and screen space with everything else that is running, so performance and reliability become uncertain. One laptop reboot in the middle of a conference can kill the meeting. A real phone instead puts communicating "on top;" It doesn't get lost, it doesn't crash, and it always works.

A BYOD is uncomfortable

There is a big difference between the short calls that are made on a smartphone and the hour-long discussions in a business. Users get fatigued; It's hard to consistently perform at your best when you aren't sure whether they can hear you or if the call is still running.

Where is the camera pointed?

Even a brief glimpse of sales figures on a whiteboard, a personal wall decoration, or an unannounced guest can be catastrophic to a business situation. A good Business Media Phone avoids this with an assigned place on the desktop for a stable field of view, and often adds a mechanical camera shutter to bring absolute confidence. The BYOD has neither.

A BYOD is built to minimize power use

This ekes out battery life, but also means it sleeps frequently, dims the display, and operates all functions at the minimum usable level.

On a soft client, the controls keep moving

A real phone provides a dedicated display and dedicated controls so that, for example, there's no embarrassed scrambling to find the "Mute" button when someone walks in. With a real phone, phone functions don't get buried under spreadsheets, messages, and all the other screentop activity that sprouts up during a busy meeting.

A BYOD is fragile

Let's face it, they look cool, but the typical smartphone encloses all those smart entrails within a thin glass screen and a slippery shell. It's not just the glass; any number of internal functions can fracture if dropped even once, because there is not much space for protection inside that slender package.

A BYOD is not a speakerphone

A BYOD is not built for open-air operation. The microphone picks up a lot of noise, the user struggles to hear the people at the other end through its tiny speaker, and privacy is lost.

These are just some of the reasons that enterprises who have moved toward "BYOD everywhere" for messaging and mail have seen a strong backlash when they try stretching it to telephony and real-time communications. A business call is not a family chat—managers and workers are frustrated with the unreliability and inconvenience of their mobile devices, IT organizations are wasting time trying to make them do what they were never intended for, and enterprises are impacting their own productivity and profitability by taking on smartphone "science projects" that get in their own way and, at the end of the day, add no value to the organization.

Instead, the accelerating trend is toward putting the right dedicated communications tool at every working position. For places like home or office desk, tabletop, open cubicles, or hotel rooms, that tool is often a real VoIP phone or Business Media Phone. With Polycom's phones and Business Media Phones, there's more good news too, they integrate smoothly within hybrid organizations that use both mobile and stationary workers.

Conclusion

The desk phone has changed and today does enormously more than it did in the past, but it remains a keystone of effective business operation. By providing consistency, reliability, comfort, and an easily managed connection, there are few tools in business that prove their continuing worth as well, or as quickly, as a well-built tabletop voice or Business Media Phone.

Over the past three years, the tables have turned. Savings that some organizations had expected to gain by leveraging employee BYOD's have evaporated as enterprises are often now the ones who buy those smartphones for employees, often at considerably higher life-cycle cost than a well-built desk phone. This is one reason that we're really not entering a "smartphone world," and why the market for real desktop phones of all descriptions continues to grow. Organizations that experiment with smartphones discover that they're no panacea, and they return to the purpose-built and IT-friendly desktop phone—and especially to its powerful newer sibling the Business Media Phone—as the tool for doing what they do best, communications without compromise...

The bottom line is this, whatever the final decision for each employee turns out to be, the first step toward making those right choices is to investigate carefully, be sure to understand what is important to the organization and to each user, and get the facts about the options available when making a long-term investment like a phone system.

About Polycom

Polycom is the global leader in open standards-based unified communications and collaboration (UC&C) solutions for voice and video collaboration, trusted by more than 415,000 customers around the world. Polycom solutions are powered by the Polycom® RealPresence® Platform, comprehensive software infrastructure and rich APIs that interoperate with the broadest set of communication, business, mobile and cloud applications and devices to deliver secure face-to-face video collaboration in any environment.

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