

Collaboration Solutions for SMB:

Improve Operational
Efficiencies and Accelerate
Growth with Voice and Video

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INTRODUCTION

SMBs (Small, Medium Businesses) have always faced an uphill battle when competing with larger, more established companies. The challenge becomes even more daunting given the current economy which has resulted in slower business growth, reduced sales opportunities and lower revenues in many cases.

There is, however, an opportunity for SMBs to take advantage of this economic downturn. SMBs that can respond to global demands, fortify relationships with customers and maintain financial control in these times will be the most competitive and the most successful.



Communications – both intra- and inter-company – will play a major role in helping SMBs meet key organizational, operational and business objectives.

This white paper will show how collaboration solutions – voice communications, video conferencing and wireless telephony – will help SMBs turn challenges into key differentiators, ultimately enabling them to be more efficient, more effective and, ultimately, more competitive.

In summary, collaboration will provide SMBs with the following benefits:

- Improved Operational Efficiency
- Solid Return on Investment
- Minimized Travel Costs
- Shortened Time-to-Market
- Enhanced Corporate Image
- Faster Decision Making
- Reduced Carbon Footprint

Key SMB applications include:

- Company-wide Communications
- Vendor/Supplier Relationships
- Employee Training/Distance Learning

Specific application areas in which collaboration can make a major impact include:

- Corporate Office
- Branch Office
- Executive Desktop
- Virtual Worker

SMB INDUSTRY OVERVIEW

The definition of a small/medium business varies. In many cases, SMBs are defined as having less than 1000 employees. SMBs can be in any vertical industry – manufacturing, healthcare, financial services, retail, hospitality and others. And, SMBs have several unique requirements due in large part to their smaller size both operationally and financially. Some key SMB characteristics include the following.

Focus on Operational vs. Capital Expenses

While all companies (large and small) focus on cost reduction, SMBs typically do not have the revenue streams or the manpower resources of larger companies. They are therefore more fiscally conscious. When purchasing technology, the use of leasing programs and other financing options are often used to minimize capital outlay. Solutions that scale as the company grows are also key to SMB investment protection.

Limited IT Support

In many SMBs, dedicated IT support is rare. It is typical for an employee to multi-task and take over IT duties in addition to normal responsibilities. The need for solutions that are easy to install, easy to modify and easy to maintain is critical. Managed service offerings are also often considered. Rather than owning equipment outright, renting or leasing products combined with support services from a local service provider gives SMBs the flexibility they need to enhance operations while minimizing capital expenses.

Geographically Dispersed Teams

To compete with larger corporations, many SMBs must think and act larger than they are. A network of geographically dispersed suppliers, partners, contractors and vendors is often needed to expand reach and increase functional disciplines.



But with globalization comes difficulty especially in terms of managing and ensuring strategic consistency across this eco-system. How do you remove the distance and cultural barriers that can often lead to misunderstandings? How do you build and strengthen

relationships with the supply chain in a global economy?

Enterprise Industry Application Similarities

While there are clear differences between SMBs and larger companies (especially in the areas of size, finances, resources and brand name recognition), there are also many similarities. An SMB, in many instances, can be viewed as a smaller version of a larger company. Therefore, many of the industry applications, benefits and business metrics between the two are the same.



- A small manufacturer, for example, strives to reduce time-to-market as does a global manufacturer.
- A physician's office must focus on rapid and accurate patient diagnosis as does a large hospital.
- A regional bank or local retailer must provide high levels of customer service to attract and retain customers.

Within both SMBs and larger enterprises, the functional departments or lines of business are also very similar.

- HR seeks ways to reduce hiring times while enhancing company-wide communications.
- Research and development teams look to create innovative products that meet market requirements.
- Operations is responsible for streamlining processes and procedures.
- Customer service focuses on shortening response times.
- Training departments search for innovative ways to provide interactive training to large, widespread audiences.

Bottom line, focusing on industry applications and line of business workflow processes are common in both SMBs and larger corporations.

Green Initiatives

Companies in all industries, not just SMBs, are becoming more environmentally conscious. The need

to reduce carbon emissions is rapidly becoming a key corporate initiative.

With a variety of transportation options available – on the ground, in the air, over water – it is easy to move people and products around the globe. But this creates environmental challenges.

A single roundtrip airline flight from New York to London, for example, generates approximately 1.2 tons of carbon dioxide emissions. A flight from Los Angeles to Tokyo generates just over 3 tons of carbon emissions. By contrast, the average automobile produces nearly 5 tons pounds of carbon dioxide annually.



There clearly is a need to reduce the impact on the environment through travel reductions. But unless other options for face-to-face meetings are available, companies must continue to drive, fly and sail around the world to maintain business.

THE NEED FOR COLLABORATION SOLUTIONS

As shown, the challenges facing SMBs today span across multiple industries and are independent of company size or product. SMBs must overcome these challenges but it is no easy task. Communication technology will play a major role in this effort.

By using voice and video conferencing and collaborative solutions, SMBs have the solutions, applications and tools to become more efficient in their operations and more successful in the long run

VOICE SOLUTIONS

Voice communication is a given in today's business world – telephones are everywhere. But yesterday's telephone is not necessarily today's telephone. Recent enhancements to voice technology have created a number of new products and solutions that make audio communications more life-like and more productive.

HD Voice

SMBs with global partners are often faced with cultural issues, time zone differences and language barriers. The ability to be heard clearly and concisely is key to

ensuring accuracy and comprehension. The slightest differences in voice inflections or word pronunciations can result in misunderstandings and problems. The word “ma” in Chinese, for example, can have four different meanings depending on the pitch or inflection used by the speaker.

High definition (HD) quality sound, therefore, becomes a critical component of an audio conversation – the



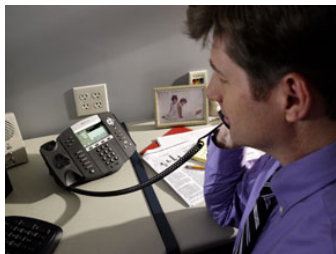
better the quality, the more accurate the audio recognition. Today’s HD voice technology can provide high-fidelity calls up to 22MHz which provides far more clarity than traditional 3KHz analog telephones. How

important is this ability to support higher frequencies? In English speech, while most vowels can be clearly understood at 3KHz, consonants require higher frequencies to be clear. To understand the difference between “f” and “s,” for instance, frequencies above 3KHz are needed. Without HD Voice technology, the statement “The products are sailing through the QA process” could easily be misinterpreted as “The products are failing through the QA process”.

HD voice ensures accuracy and full comprehension, which is crucial when dealing with remote, diverse groups in different locations and in various countries.

IP Telephony (VoIP)

Voice over IP (VoIP) telephony refers to the use of the Internet Protocol (IP) and packet-switched networking



to enable voice communications. Traditionally, voice communications has been done over circuit-switched connections of a public switched telephone network (PSTN).

By using IP, calls can be made using packets of data on shared lines (such as a Local Area Network or the Internet) thereby avoiding costly PSTN-related tolls. The savings can be significant especially when considering the recurring costs of domestic long distance calling, international long-distance and local telephony connections.

And since VoIP uses digital signals, a variety of applications can be developed to provide customized

information to users. Real-time stock reports, weather forecasts, presence-based systems, video-conferencing and other digital applications help transform the IP phone into a powerful productivity tool.

For SMBs, IP telephony allows high quality, reliable communications between remote locations at a fraction of the cost of traditional analog lines.

Conference Speakerphones

Conference speakerphones are ideal for cross-functional meetings, development discussions and other SMB team activities.

Conference speakerphones with HD voice technology enable conference calls that sound as natural as actually being in the room. Advanced designs



including echo cancellation, acoustic clarity technology and room-wide audio system integration ensure everyone in the conference is heard. New mobile phone

immunity features help to eliminate the annoying buzz through speakers and microphones, including those in conference phones.

Bottom line, as with traditional telephones, not all conference speakerphones are created equal. SMBs seeking to maximize the productivity in their conference rooms must consider the use of speakerphone solutions that provide life-like, high-fidelity audio.

In-Building, Premise-Wide Wireless Phones

The proliferation and adoption of in-building wireless networks has spurred the introduction and use of wireless phones (Wi-Fi, DECT, 900MHz). As with most wireless computer networks, these wireless phones are normally limited to in-building connectivity. Repeaters, access points and other wireless range extenders enable connectivity to a larger area, but this is typically limited to premise-wide coverage. These phones should not be mistaken with mobile or cellular phones which provide wide area network coverage but often have spotty coverage in harsh environments such as those in manufacturing or medical.

SMBs can utilize these premise-based wireless phones in a number of ways. By leveraging off of an existing Wi-Fi computer network infrastructure, the

addition of voice mobility is highly cost effective. And easy integration with existing PBX and phone systems streamline implementation.

Wireless phone users can now stay in touch throughout a facility with easy access to key resources and information. Voice mail messages on tethered desktop phones and the associated delayed responses disappear. Productivity is improved and decisions can be made faster.

Most wireless phones also have development platforms that enable integration of unique, customized



applications. For example, automated equipment monitoring applications and real-time location based services, when integrated into these wireless phones, can minimize downtime and speed decision-making. If a piece of equipment is failing or if a patient needs immediate assistance, for instance, an alarm or text message can be

instantaneously sent to the person closest to the problem (or with the most expertise) to ensure rapid response and expedite problem resolution.

VIDEO CONFERENCING SOLUTIONS

To enhance audio-only calls and to further increase communication effectiveness, many companies are implementing video conferencing solutions.

Visual communication plays a major role in the overall effectiveness of communication by providing visual, non-verbal cues that aid in comprehension. The combination of the aforementioned voice solutions with video conferencing results in a complete communication and collaborative experience.

HD Video

As with HD voice, the latest video conferencing products and solutions use HD video technology for the most realistic images possible.

Nodding heads, raised eyebrows, crossed arms and eye contact (or lack of) all help to gauge understanding, agreement and integrity. In fact, researchers have focused studies on the role of verbal and non-verbal communications. While some reports indicate that nearly 80 percent of communication is non-verbal, the most famous study on this subject

comes from Dr. Albert Mehrabian. In his “7%-38%-55% rule”, he concludes that that only 7 percent of communication comes from spoken words, 38 percent from the tone of the voice and 55 percent from body language. The ability to clearly see these body language details is now possible with HD video.

Older generation video conferencing products simply did not provide the clarity or image quality required for effective business-critical visual communications. Blurry images, pixelized screens and difficult-to-read content limited video conferencing acceptance.

HD video, however, is expected to be a catalyst in video conferencing implementation. With better resolution, HD content sharing and bandwidth optimization technologies, companies are literally seeing the difference that HD brings to video communication.

Green initiatives and corporate travel policy restrictions are adding to video conferencing’s widespread usage. By removing the face-to-face distance barrier,



HD video not only minimizes the impact on the environment, but also helps to maintain personal relationships with customers, suppliers and partners. As stated by the industry analyst firm Frost and Sullivan, “HD will enable users to accept video conferencing, therefore increasing adoption and utilization.”

In addition to travel savings and improved partner/supplier relations, HD video can be used to remotely analyze specific product components, minute configuration designs (such as printed circuit board layouts) or even patient x-rays thereby eliminating the need for time-consuming shipping of product samples or patient records. HD content (presentations, videos, etc.) can also be shared with multiple locations. And technologies such as loss packet recovery optimize image quality even in low bandwidth areas.

Immersive Telepresence

Another major trend in video conferencing has been the emergence of immersive telepresence solutions. These solutions provide the most realistic video conferencing experience possible – true-to-size dimensions, exceptional HD voice, high quality video – to create the illusion of being in the same room.

These solutions are ideal for corporate board meetings or executive-level briefings where face-to-face, life-like



discussions are expected. Department heads or executives from partner or supplier companies can meet regularly with counterparts throughout the

world as if they were across the table.

Operational Video

In dynamic SMB environments such as manufacturing or retail, the need for mobility is obvious not just for voice as mentioned before, but also for video.

A technician or floor clerk equipped with a wireless video conferencing system could transmit video images of the defective equipment to remote support personnel. These remote experts could assist in the repair process by identifying the problem, making recommendation and, if needed, walking the technician through the entire repair process.

A mobile video conferencing unit could be also be used to have interactive discussions with line personnel and engineering directly on the manufacturing or retail store floor to discuss new designs or build processes in real-time.

SMB APPLICATION AREAS

The following SMB application areas are potential usage areas for voice and video collaboration solutions.

Corporate Office

SMBs have the ability to collaborate with staff, customers and suppliers regardless of their location – whether they are in the same city or across the world. Video conferencing provides regular face-to-face communications between office locations allowing products to be brought to market quickly and shortening sales cycles. The need to travel is reduced resulting in significant time and financial cost savings as well as reduced carbon footprint. IP telephones provide staff with high quality, secure, communications at a fraction of the cost of leased lines. Wireless telephones allow staff to communicate from anywhere in the building regardless of their location.

Branch Office

With collaboration solutions, branch offices now have access to key resources such as remote product experts, distance learning instructors and other headquarters support personnel. Interactive, engaging discussions become the norm rather than the exception. Training and strategy implementation becomes consistent (especially via streaming or on-demand training). And the branch office becomes a productive extension of the corporate location.

Executive Desktop

Executives, whether in large corporations or SMBs, are often in board meetings, customer discussions or legal negotiations. Video at the desktop enables these executives to build face-to-face relationships while maintaining the privacy required for confidential discussions.

Virtual Worker

Remote office workers or vendors now have the ability to stay connected visually. The result is a true sense of “team” resulting not only in increased productivity, but also improved morale.

For more information on this white paper, please contact the Polycom Enterprise Solutions Team at enterprise.solutions@polycom.com.