The Evolution of Video: How the Cloud is Making Pexip Possible for the Enterprise

Executive Summary

These are exciting times for the video conferencing industry. The popularity of video as a preferred mode of communication is growing exponentially in the enterprise. Modern businesses are beginning to feel the importance of collaboration more strongly than ever, owing to today's increasingly global marketplace. As companies are realizing the need to support a diverse and distributed workforce across several time-zones, they are looking for efficient, cost-effective, and sustainable ways for their globally dispersed employees to collaborate—quickly and easily—regardless of where they are located.

Video conferencing has evolved over the past few years from being a room-bound, high-maintenance, resource-intensive technology to being a versatile, scalable, and cost-effective solution. Much of this transformation can be attributed to the changing enterprise landscape, where connectedness has emerged as the top priority. Technologies like the cloud, mobile, and social are also changing the way video is being leveraged for business purposes. As a result, several new trends have formed that are steering the course of the video industry.

This white paper will provide a brief overview of the current state of the videoconferencing industry; how cloud as well as other factors are impacting its role in the enterprise; and how these trends are seeing the workplace tilt on its axis. We will also look at why and how companies need to invest in this trend to create happier, more productive employees.



The Past, Present, and Future of Video in the Enterprise: An Overview

Between free consumer video platforms like Skype, Google+ Hangouts, Apple's FaceTime, Facebook's Messenger App, and dozens of paid, enterprise level video services, the business world has recognized video as a tremendous force for knocking down barriers of distance. Companies of all sizes and budgets are investing in and making use of video as one of the most efficient ways to communicate on a daily basis. But this wasn't always the case. As a technology that has been around for more than two decades, videoconferencing has witnessed many shifts in trends.

In the past, videoconferencing was reserved for enterprises with huge spending power. Owing to the steep cost and complexity of videoconferencing bridges and gateways, very few enterprises had their own infrastructure. Video endpoints were typically expensive, so most of the early adopters could only afford a limited number of systems. The traditional video conferencing architecture included rooms full of equipment, each connected to a dedicated network. Moreover, it required full-time professionals to operate and manage these systems, which added significantly to the cost of video systems deployment. Of course, let's not forget that, even with the high cost of investing in early videoconferencing systems, the technology simply could not meet enterprise-standards of quality.

While CEOs and CIOs struggled with high-cost, low-quality video offerings, the consumer industry was introduced to affordable and easy-to-use video calls, thanks to applications like Skype. Skype sparked the popularity of consumer video platforms in the business space as low-budget businesses could finally reap the benefits of video conferencing at near-zero cost. It was a cost-effective solution for businesses, but by no means was it the ideal solution. The lack of security on consumer video platforms left businesses vulnerable. Many businesses weigh the risks between a lower priced, easy to use system versus a secure one, putting their business and reputation at stake.

New enterprise video solutions, however, are changing these dynamics. Many modern vendors are offering affordable, simple-to-use, and highly secure video systems built for seamless collaboration and continuity of communication from anywhere. In addition, videoconferencing has found new business applications, extending into areas like talent acquisition, recruiting, and training, making it a complete communication solution.

Another change, perhaps the biggest, to hit the enterprise videoconferencing space is the proliferation of new technologies like the cloud, mobile, and social. The arrival of these forces has led to the rise of new trends—BYOD, telecommuting, and mobility, to name a few—that are drastically changing how video is being used by businesses. However, industry reports indicate that cloud could be the most influential factor shaping the future of the videoconferencing industry. A report by *Global Industry Analysts (GIA)* recently estimated that the cloud-based video conferencing services market could reach \$2.9 billion by 2020. Another new report, *Global Cloud-based Video Conferencing Market 2015-2019*, by Technavio,

predicts the cloud-based video conferencing market to grow at a CAGR of 39.6 percent by 2019.

Why is Enterprise Video Moving to the Cloud?

Currently, there's a lot going on in the world of video conferencing. And, most of it is driven by tech innovations that are changing the way we do business. Cloud and mobile are two major factors transforming business, and they play a starring role in determining the growth of video in the enterprise. A recent survey by IDG Connect expects the global mobile workforce to reach 1.3 billion by 2015— more than one-third of the total global workforce. The same survey also found that 40 percent of working people use their smartphones for business purposes, while 18 percent use their tablets for the same reason, at least once a day. As mobility pushes deeper into the enterprise, companies need mobile-compatible solutions for their everyday operations, and communication is no exception. Cloud, as opposed to rigid, on-premise solutions can address the needs of the changing business scene.

The business world is also increasingly moving closer to an everything-as-a-service model. As a result, many companies are embracing the benefits of cloud. According to *CDW's 2013 State of the Cloud Report*, companies migrating to cloud-based software and services enjoyed a 25 percent reduction in IT costs. The report also found conferencing and collaboration to be the top cloud service applications across industries. The findings account for one of the most obvious trends in video conferencing today—the decline of room-based systems.

Worldwide Enterprise Videoconferencing and Telepresence Equipment QView 2014, by IDC, concluded that despite seemingly positive growth in the videoconferencing equipment market in 2014, over the last two years the overall market has been experiencing a decline in revenue. Rich Costello, senior analyst in enterprise communications infrastructure at IDC, attributed findings to "the ongoing market transition from a primarily hardware-based technology to one impacted by the growing interest in software-based solutions and video subscription services."

While cost is definitely a major factor, there are stronger reasons for companies to adopt Video Conferencing as a Service (VCaaS). The on-premise approach to video conferencing doesn't make sense in this day and age due to the fact that many businesses are now more global. Teams work from diverse locations, in some cases across several time-zones, and on multiple devices. Expensive hardware-only solutions fail to meet the demands of modern enterprise collaboration, which is more dynamic and agile than ever before.

Another advantage of switching to cloud is fully-managed technical support that allows businesses with limited or no in-house IT expertise to harness the benefits of videoconferencing. Most cloud vendors offer set up and troubleshooting as a complete package, which eliminates the need for businesses to recruit IT staff for operations and maintenance. In today's economy, in order to compete profitably businesses need to get more done with fewer resources. Cloud-based services help

businesses become more productive, while significantly reducing the cost of operations.

The nature of the workforce has changed over the past few years. Global businesses have witnessed the emergence of a new breed of employee—the tech-driven millennial—digital natives who have grown up with video as a communication tool. Their immersion in the technology, along with their love for faster, on-demand and always-on collaboration solutions makes cloud video a perfect choice for them. By 2020, Millennials will make up the largest percentage of the global workforce, so it's smart for businesses to embrace cloud video services today, rather than wait.

Video Conferencing Trends in the Cloud

With an enormous growth potential in the enterprise, cloud is breaking the traditional image of videoconferencing as an expensive, complex, and resource-intensive communication model. Cloud-based video solutions support the bandwidth, stability, and scalability demands of modern enterprises. As such, cloud-based video conferencing is driving some new trends in the area of business communications. Here are a few of them.

Desktop video conferencing. Low-cost cloud video solutions are taking visual communications beyond the conference room to where employees are working. This move is fueled by the need to stay connected outside of scheduled meeting hours. Also, in the case of conference-room based videoconferencing, there are often scheduling conflicts and equipment limitations that undermine the true intent of today's modern meetings—any-time collaboration.

Real-time communication using WebRTC. Browser-based video conferencing using WebRTC is becoming a popular trend in the enterprise. Its ability to complement existing technologies—especially with cloud—allows it to compete with and even replace low-quality web conferencing. WebRTC can be a more secure method for businesses to add external users to their video meetings. A directive by the Internet Engineering Task Force (IETF) recently made it compulsory for browser developers supporting WebRTC to integrate VP8 and H.264 video codecs. As a result, many enterprise software developers and UC vendors will start embedding WebRTC into their products.

New revenue streams in mobile video. The trend of mobile videoconferencing presents new business opportunities for cloud vendors in the form of new markets and revenue streams. Mobile video requires customers to invest in better data plans, mobile device management (MDM), and mobile access management (MAM) for facilities assignments, security, and maintenance.

Connected devices for more intuitive collaboration. A report from Garner predicts that by 2020, 25 billion "things"—devices connected to the Internet—will be in use. As our devices become smarter, collaboration will become more intuitive. This means, businesses will need to ensure a steady and seamless flow of communication among clients, partners, and globally dispersed units. High-definition vid-

eo conferencing without an expensive or complicated set-up will help businesses achieve this level of connectivity and collaboration.

Consumer-like video with enterprise-like security. With the increasing concerns over using consumer apps and devices in the enterprise—a trend popularized by the growing BYOD (bring your own device) culture—businesses need to balance ease-of-use with their desired level of security. Video in the enterprise must have consumer-like capabilities that help workers to collaborate on-demand, with anyone, from anywhere. But, at the same time, it must also have business-grade features and enterprise level security.

Making Cloud Video Work: Key Considerations in VCaaS Investment

Before marching down the road to VCaaS investment, it is important for organizations to understand the key considerations that lie at the heart of successful cloud video deployment. These include:

Quality and performance. When it comes to choosing a cloud video service, it's important to look for a vendor who can offer seamless service on all devices, be they company endpoints, or employees' devices. 3G/4G mobile network support ensures collaboration can be achieved from virtually anywhere. Ideally, the vendor should be able to meet all enterprise requirements without compromising video quality.

Compatibility with existing systems. A large problem for video deployment lies in bridging different departments working on different systems. Failure to connect due to incompatibility issues is a huge set back. Therefore, it's wise to invest in a system agnostic videoconferencing system, essentially a system that can run on any operating system. This is an important factor to consider, especially if the organization has already made hardware purchases.

- IT issues. Since bandwidth and network capability go hand in hand, and they greatly impact the final outcome of your video deployment, it's important to identify the bandwidth needs of your business before making video investments.
- Scalability. For most small and mid-sized businesses, it's always advisable to invest in services that offer maximum scalability. A service that is flexible enough to go up and down with the performance requirements of the organization is the most desirable and cost-effective model for SMBs.
- **Security.** With cloud, organizations put their security in the hands of someone outside their corporate firewall. Therefore, it's always important to double-check the levels of security being provided. It's also advisable to have security clauses spelled-out clearly in the Service Level Agreements (SLAs).
- **Trial period.** Choose a video conferencing service provider that offers a trial period, so you can put the service to the test. This will truly reveal

whether or not the service is capable of meeting all the demands of your business, and saves post-purchase hassles.

Conclusion

While video conferencing isn't a new technology, its integration with cloud has presented businesses using it with endless possibilities for growth and scalability. Most of the recent developments like BYOD, remote work, and telepresence meetings, wouldn't have been possible without the power of videoconferencing, and cloud access has taken video's benefits to a whole new level. Moreover, in an environment where businesses are increasingly going virtual, there's a risk of losing the human touch in modern business communications. Video conferencing is the only technology capable of filling that void, by replicating the real feel of in-person meetings and face-to-face interactions.



To find out how your business can optimize its gains from leveraging simple and seamless collaboration solutions, visit Pexip.com for a detailed analysis.

About Pexip

Pexip is a cloud video service provider that makes it easy for organizations of any size to use professional video conferencing. Having built the largest automated cloud for business quality video communication, Pexip exists because we believe that cloud video conferencing is a game-changer for people and businesses. The cloud is making high quality video affordable and widespread. Pexip is at the forefront of this trend. Users can enjoy high-quality video conferencing from any device, on any platform, and from any location—the Pexip service brings them together.

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Resources

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