



Next Generation Video Conferencing

Boosting the Productivity of a Decentralized Workforce

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Executive Summary

Knowledge workers are individuals who are valued for their ability to act and communicate with expertise. Over the past 30 years, they have driven more than 70% of economic growth in the U.S.¹ The ability to gather and share information is essential to their success, but communicating and collaborating has become increasingly difficult as co-workers, suppliers, partners, and customers have become widely distributed across time zones and geographic boundaries.

Globalization, economic pressures, competition for talent, and work/life balance initiatives have all contributed to the decentralization of today's workforce. The new knowledge workers are also mobile, accounting for more than 70% of the total workforce in the U.S.² They work from multiple locations using a variety of mobile devices such as notebook computers, smart phones, and tablets.

Traditional tools like email, phone, and face-to-face meetings are still the most common ways that knowledge workers communicate and collaborate. Nonetheless, today's businesses are looking to implement next generation collaboration tools that help drive productivity in a decentralized work environment. HD video conferencing solutions can provide knowledge workers with a high level of engagement without the costs of downtime and travel-related expenses. So why is it that only 20% of knowledge workers currently use video conferencing to collaborate and share information?³

Although there is a high level of awareness around video conferencing as a collaboration solution, usage has typically been limited to C-level boardrooms within large organizations. Legacy installations typically involved heavy capital investments, were difficult to setup and maintain, and often suffered from poor quality. However, next generation HD video conferencing solutions have become available that are cost effective, simple to set up and use, deliver error resilient HD video quality and accommodate more flexible deployment by working from an organization's currently owned computing endpoints including mobile devices, desktop computers, notebooks and legacy video conferencing hardware. With the increasingly widespread adoption of broadband and vastly enhanced price/performance due to the emergence of HD video conferencing as-a-service providers, industry analysts are predicting explosive growth in desktop based video conferencing as a solution for achieving productivity gains throughout the entire organization.

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¹ "Economic Conditions Snapshot", McKinsey 2010

² "Mobile Knowledge Workers: Emerging Opportunities", Infotrends 2011

³ "Making Collaboration Work for the 21st Century's Distributed Workforce", Forrester Consulting 2010

Trends Driving the Decentralized Workforce

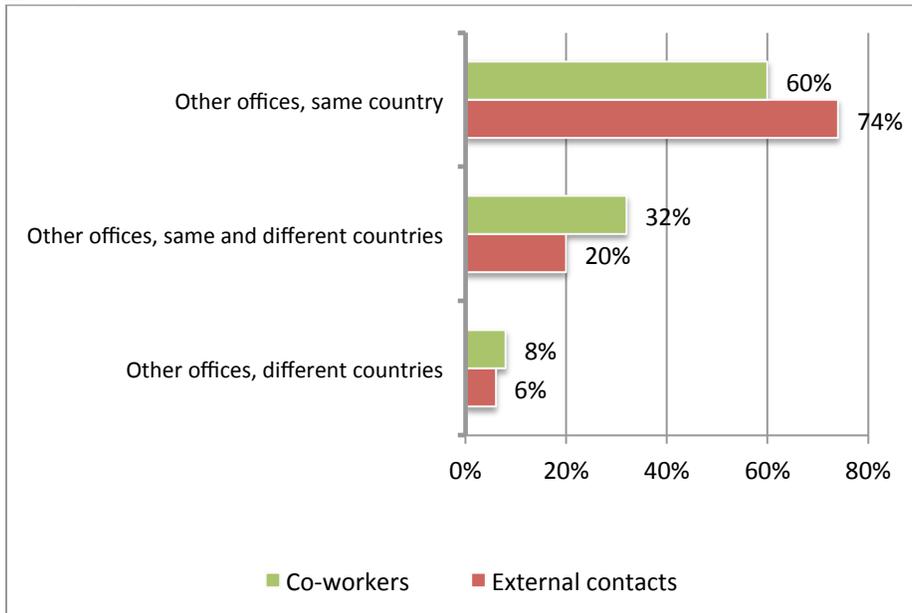
Gone are the days when all workers reported to a central office or plant, worked 40 hours a week, and stayed with the same employer until retirement. Forrester currently estimates that 30% of business people work from multiple locations, whether it be from home, satellite offices, on the road, or client sites.⁴

A shift in recruiting practices has been a key factor driving decentralization of the workforce. In order to remain competitive, companies are sourcing the best talent available regardless of where they are based. Employees and contractors are hired to work from remote locations and critical skill sets are being outsourced to entire teams based in different countries. As a result, over 80% of knowledge workers communicate on a regular basis with co-workers in other offices and nearly 90% interact with people outside the company in other offices, whether they are located across the country or around the world.⁵

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Figure 1: Communication and Collaboration with Co-workers and External Contacts



Source: Future of Work 2011

Growing emphasis on work/life balance is another trend driving decentralization in the workforce. Knowledge workers who work out of their homes spend 53% of their work week there and by 2016, 43% of all workers in the U.S. will telecommute at least part time.⁶

⁴ Ibid

⁵ Ibid

⁶ "US Telecommuting Forecast 2009-2016", Forrester 2010

In addition to being based in multiple locations outside of the corporate headquarters, today's workforce is also highly mobile. IDC estimates that the mobile worker population will grow to 1.2 billion people or more than a third of the worldwide workforce by 2013.⁷ Widespread broadband adoption has revolutionized the way knowledge workers connect and communicate. On a weekly basis, 67% of knowledge workers use notebooks, 40% use smart phones, and 7% use tablets for their jobs.⁸

Communications has always been a mission-critical function, but ensuring that knowledge workers are connecting and collaborating in today's decentralized business environment can be extremely challenging.

Video Conferencing for the Decentralized Workforce

Although face-to-face meetings are considered very effective for communicating and building relationships, they are not always feasible from a time and budget standpoint. Traditional tools such as email and phone are cost effective and accessible, but they do not provide a rich environment for sharing information.

As organizations become increasingly decentralized, they are turning to advanced communications and collaboration technologies such as desktop based HD video conferencing to enhance productivity among geographically dispersed teams. Gartner predicts that by 2015, 20 million workers globally will run corporate supplied video conferencing from their desktops and the market will reach \$8.6 billion. Key benefits for using video conferencing are cost reduction, improved collaboration and productivity, and better customer service.⁹

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Figure 2: Most Important Benefits of Video Conferencing



Source: Frost & Sullivan 2011

⁷ Worldwide Mobile Worker Population 2009-2013 Forecast, IDC 2010

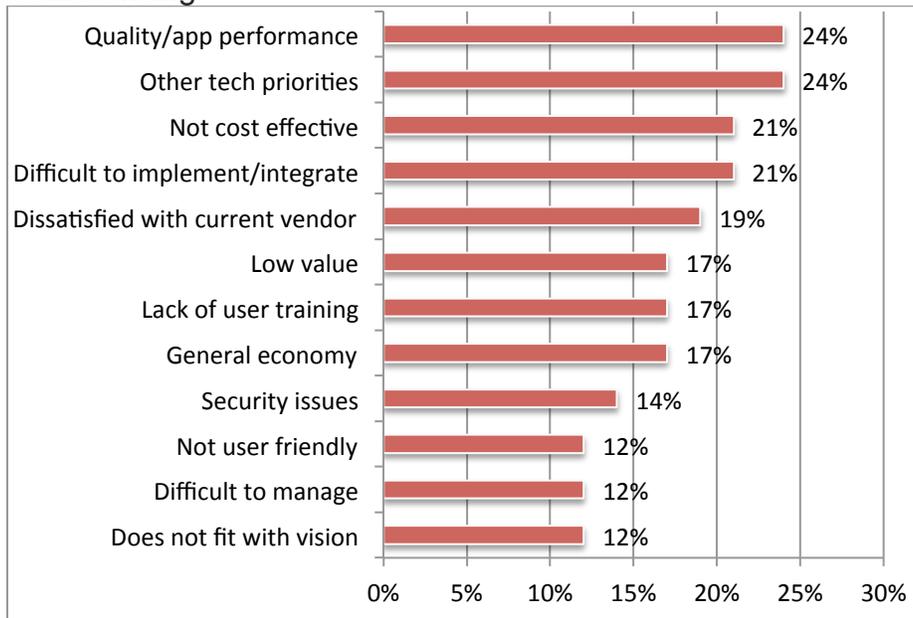
⁸ Ibid

⁹ "2010 North America Investment Decisions in Communications and Collaboration Products and Services", Frost & Sullivan 2011

Despite the significant value video conferencing delivers, it is not a solution that has been widely used by many organizations for communicating and collaborating. According to a survey conducted by Frost & Sullivan, approximately half of companies use video conferencing, but 41% indicate it is mainly used by senior management. Volume of usage is also low---Gartner estimates that the typical room-based video conferencing endpoint has an average utilization of only 45 minutes a day.¹⁰ When it comes to video conferencing usage by knowledge workers, only 20% currently use it to collaborate and share information, and 50% of those who don't use it said the reason is lack of access.¹¹

In the past, video conferencing solutions were difficult to set up and maintain often suffered from marginal performance, and usually involved large capital outlays. They typically required dedicated bandwidth, onsite IT support, and had limited endpoint compatibility (limiting deployment to board rooms and executive offices). Based on these issues, it's no surprise that a recent survey conducted by CDW showed that the top barrier to implementation for video conferencing solutions is the inability to justify the investment.¹² According to a Frost & Sullivan survey of C-level executives in North America, the primary reasons for delaying implementation of video conferencing are quality and application performance issues, other technology investment priorities, and cost.

Figure 3: Factors Influencing the Implementation Delay of Video Conferencing



Source: Frost & Sullivan 2011

¹⁰ "Dataquest Insight: Videoconferencing Products and Services Market Forecast Worldwide 2007-2013", Gartner 2009

¹¹ "Making Collaboration Work for the 21st Century's Distributed Workforce", Forrester Consulting 2010

¹² "Video Conferencing Straw Poll", CDW 2011

Given the advent of next generation HD video conferencing solutions and the ubiquity of broadband access, companies no longer need to delay the implementation of these remote collaboration solutions that boost workforce productivity. Software-as-a-service video conferencing solution providers now deliver HD video conferencing over best-effort IP networks, eliminating the high cost and scalability issues associated with operating MCU based hardware systems over dedicated IP networks. Instead of being limited to collaborating remotely from corporate video conferencing rooms, knowledge workers can now leverage their own desktops computers, notebooks, smart phones, and tablets for conducting virtual meetings from anywhere.

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Conclusion

Today's knowledge workers must frequently communicate and collaborate with co-workers, partners, and clients from multiple geographic locations using desktop computers, notebooks, and mobile devices. Although phone, email, and face-to-face meetings are still the most commonly used communication tools, they do not provide the most cost efficient or effective means for collaborating across remote locations in real-time. HD video conferencing provides a rich environment that is conducive to sharing information, and enables organizations to increase productivity while reducing travel time and costs. Despite these benefits, video conferencing has not been widely deployed or used outside of boardrooms and executive offices due to the expense, difficulty of use, and the poor quality collaborative experience often associated with legacy video conferencing systems.

Industry analysts are projecting explosive growth in the video conferencing market driven by technological innovation. HD video conferencing solutions that are delivered over best effort IP networks as a service will enable companies to quickly and easily facilitate remote collaboration that boosts workforce productivity while remaining cost effective, reliable, scalable, and accessible to anyone from any device located anywhere around the world. Best in class HD video conferencing solutions should offer the following:

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- **Scalable Video Coding (SVC) Technology:** The recently approved H.264 standard for video compression provides the highest quality HD video conferencing available over best effort IP networks. This new technology eliminates the jitter and latency associated with legacy architectures and enables video conferencing for multiple participants without any noticeable delays or loss of information.
- **Accessibility from Multiple Computing Platforms:** Access to HD video conferencing from any global location, using any readily available computing device (desktop computers, notebooks, tablets) over any network (LAN, WAN, internet, wireless) enables knowledge workers to always remain highly productivity.

- **User-Friendly Interface:** An easy-to-use video conferencing interface that includes features such as active directory, desktop and application sharing, the ability to organize virtual meetings without reservations, and one-click access to join HD video conferencing sessions - all help to boost productivity and drive employee adoption.
- **Compatibility with Legacy MCU Based Systems:** Next generation HD video conferencing solutions that integrate seamlessly with traditional MCU based video conferencing infrastructure can significantly reduce the cost and improve the quality of using legacy room systems.
- **Workforce Adoption Support:** Free employee trainings provided by the video conferencing solution provider helps to accelerate companywide adoption.
- **Cloud-based Video Conferencing:** The flexibility to deploy video conferencing as a private, public, or blended cloud makes the infrastructure completely transparent to end users while delivering a scalable, reliable, and cost effective video conferencing experience to geographically dispersed employees.

About Arkadin

Arkadin is one of the world's leading providers of cloud-based remote collaboration solutions including: audio conferencing, web conferencing, video conferencing and webcasting. Arkadin understands that real-time communication between geographically dispersed co-workers, clients and partners is essential to succeeding in today's global business climate.

Arkadin provides customizable, cost-effective, user-friendly remote collaboration solutions including video conferencing, audio conferencing, web conferencing and webcasting. Founded in 2001, Arkadin has more than 14,000 customers worldwide and operates locally in 27 countries with 800+ people throughout Asia, Europe and North America. For more information, please visit www.arkadin.com.

ArkadinVideo is an HD video conferencing solution that empowers your entire workforce to engage remotely in face-to-face meetings with co-workers, clients, prospects and strategic partners around the globe using a personal computer and any high-speed internet connection.

About Palmer Research

Palmer Research designs and executes custom market research studies focused on helping IT decision makers and high tech companies meet their business objectives. Founded in 2001, Palmer Research delivers the data and intelligence clients need to better understand market dynamics, customers, prospects, and partners. The company is located in Los Altos, CA. For more information, call (650) 224-7439 or go to www.palmerresearchgroup.com.

About Debra Chin

Debra joined Palmer Research in 2006 as Senior Vice President. Her background includes executive level marketing and research positions for companies in the high tech, telecommunications, and consumer packaged goods industries. She holds an MBA from Columbia Business School and a BSE in Economics from the Wharton School of Business.