i-Klarity
Video Solutions

THE WHITE PAPER

How to make your mobile workforce less mobile -

Use video technology to reduce the ever-increasing pain of travelling for your employees and reduce the spiraling expense burden for your business.

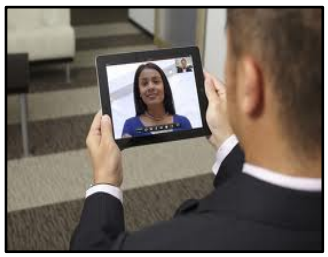
According to many analysts, the outlook for businesses is not particularly optimistic. Growth will be positive (maybe) but key indicators suggest that it is a time to implement austerity measures just to compete and survive. Companies that continue to bleed costs will not be in a competitive position to win a decreasing share of domestic and global business. Travel is becoming an ever larger proportion of the business budget as expenses such as fuel costs, train fares, air fares, hotel and subsistence charges continue to rise. For mobile workers themselves travel is becoming more difficult. Whether it is a traffic jam, train cancellations, flight delays, industrial action or other forms of disruption, travel is becoming more and more of a burden. So what is it about our obsession with travel? If there was an alternative would we take it? Consider the effect of travel to an organisation and employees.

Costs – Direct costs continue to rise. Fuel charges and Rail fares are on the rise (average 6.8% in 2012), and hotels show no sign of reducing their rates. Car drivers and company car fleets bare the brunt of rising taxes and increasing insurance premiums.

Time – A number of firms add travel time to their calendar appointments to identify time spent out of the office. Try it and you'll be shocked to see what a difference it makes. Time spent travelling is "second class" time when productivity falls.

Invasive – We have become used to employees getting up at 5 am to do battle on the motorway or hit the airport, often getting home late in the evening after completing the return journey. Responsible employers are aware that they have a duty of care for their employees and should not make unrealistic demands.

Environment – the cost to the environment in terms of pollution is immense. Are those journeys really necessary?



Is Video Conferencing the answer?

The very latest developments in room, desktop and tablet video conferencing will allow businesses to drastically reduce their travel expenditure by cutting down on unnecessary trips by their employees writes Paul Spencer, founder of i-Klarity Video Solutions. Rather than spend time on a motorway or in an airport lounge employees can spend more productive time working at their local or home office bases. After implementation, many businesses find a reduction in business travel of 25% and a reduction in costs of 30% providing a payback of the technology investment in just a few months. There are many case studies available to prove this level of saving and if an organisation plans and executes the move to a video culture correctly, those savings can be replicated.

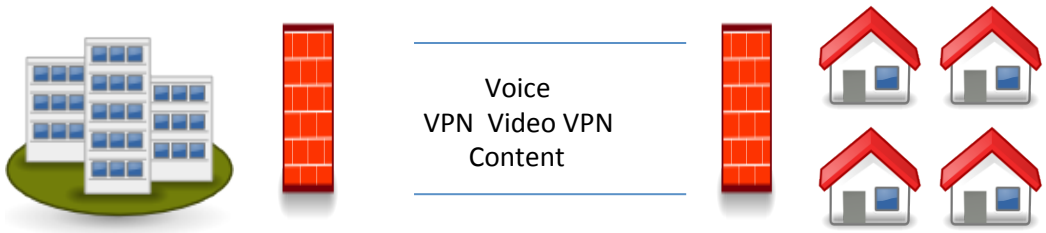
Can anything positive be said about travel? Well, many believe that there is no alternative to a real-time handshake meeting to cement a great relationship between a seller and his client. However, many environmentally aware firms are now insisting that their supply chain communicate using video conferencing technology. True, there are some occasions when there is no alternative to just being there but today, there is an alternative to those clogged motorways and packed airport lounges.

Improvements in video conferencing technology and network availability have at last given businesses a lifeline to combat the detrimental effects of business travel and allow a more flexible way of working.

Home Workers

Whether a desktop, laptop or one of the growing legion of tablet computers, the video conferencing manufacturers have a high-definition client to suit, enabling full HD video, voice and content sharing between employees, clients and suppliers. The advent of broadband at our homes has enabled high-speed applications like video to become a reality. Firms implementing Microsoft Lync can add video as an application to provide secure communication between employees and employees of clients and suppliers if they are also Microsoft Lync users.

The typical model for home workers involves initiating a call with employees at head or regional offices at their desk or at a room-based video conferencing system to avoid travel but still collaborate fully irrespective of distance.



Home workers initiate a call to a scheduled meeting and join with their colleagues at regional offices at their desk or at a room-based video conferencing system avoiding travel but still being able to take a full part in the meeting.

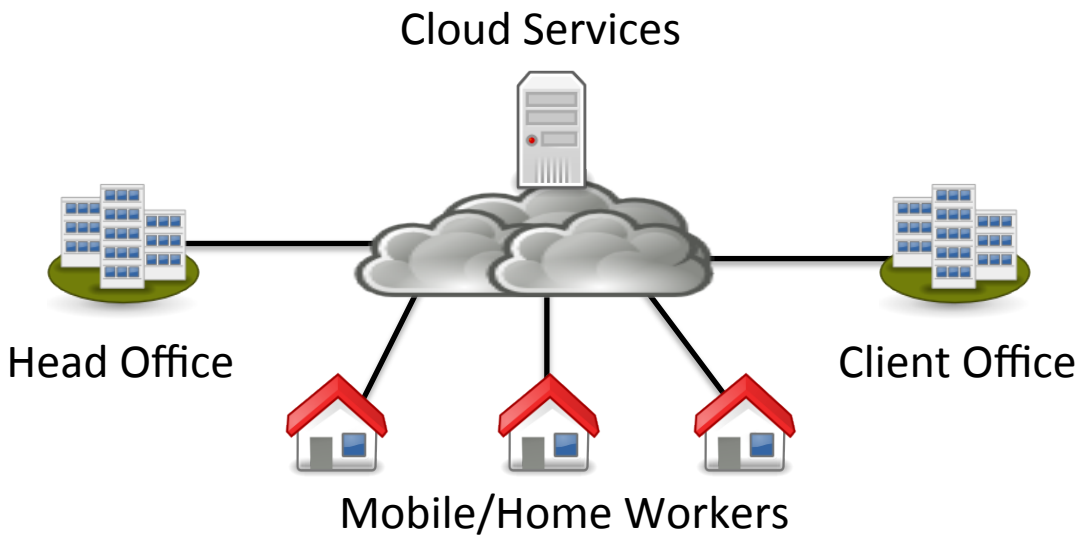
Server based systems

For the organisation with a larger mobile workforce, the introduction of a local server can significantly enhance the video experience to all users within the network. The server will usually offer Presence, Instant Messaging, Client provisioning and Management reporting. The server can sit neatly behind the firewall in the network and allow remote users with appropriate access rights to connect using (in most cases) the organisations' standard vpn client.

A number of these servers will offer gatekeeper functionality to manage bandwidth between users and scheduling to ensure that video meetings can be arranged easily and encourage use.

Cloud-Based Services

Whilst many room-based systems have their own built-in multi-point bridges to enable 3 or even 8 additional participants, larger meetings would require the significant investment involved in purchasing dedicated bridging equipment. The trend however, is to avoid this expenditure and the administrative overhead involved in ongoing management and revert to one of the new cloud-based services and have a third party manage the call.



Apart from bridging facilities for up to 28 participants, the cloud-based providers will offer personalised virtual meeting rooms available 24/7, encryption, recording and connection to ISDN users as well. There are pay-as-you-go providers as well as pay monthly per room providers to suit every kind of organisation making the adoption of video an easy task. Many cloud-based providers offer ISDN facilities to cater for any participant using legacy technology allowing them to join the conference seamlessly with other IP participants. As all calls will normally be from inside the organisation to outside, there will be no need for any additional security measures.

Some cloud providers can even include Skype and Google Video Chat users into a conference with traditional desktop systems. This can be very useful when a member of the public needs to join a conference using a web cam from a home location. Applications include interview screening or even service organisations who communicate with the public. As an example, local council officials can meet with their council tax payers without the necessity to travel to the council offices.

Virtual Meeting Rooms can now be rented for an all-inclusive monthly fee, available 24 hours a day with no booking or additional charges. Users can invite anyone with a web cam and data connection into a meeting by sending a simple weblink generated in the meeting invitation. Selecting the link will download a simple browser plug in – no charge for the meeting and no client license charging model as in the server based solutions. The lite client doesn't normally need administrative rights to install and connection is over port 80 negating the need for any complex firewall solution. Participants can share their desktops and collaborate fully wherever they are as well as manage "buddy" lists with presence.

Other facilities such as recording and web-streaming are also available.

Room Systems

Once upon a time room systems were the only video conferencing systems around and they came with a price. Today new entrants into the market have introduced systems at dramatically lower prices without sacrificing HD quality. One such entrant Aver Communications can even connect to Skype video callers.

Security

One of the concerns for organisations implementing video solutions has traditionally been network security. Whilst the major security vendors struggle to find examples of real security breaches there is no doubt that the rise in popularity of video technology will encourage the industry hackers to threaten video endpoints sooner rather than later. A potential barrier for video implementation in the enterprise is the complex port usage (both static and dynamic) that video over IP requires. Whilst this may not be too much of a problem for internal network traffic, any call from outside of the network will demand careful planning to achieve the perfect connection. Help is at hand though from the manufacturers who offer a range of video-aware firewall traversal systems to suit all sizes from home-workers to the most complex of enterprise networks ensuring that there can be no breach of network integrity. These appliances can sit neatly alongside the current firewall arrangement and directly handle the incoming video traffic allowing connection from video users outside of the network.

Successful Video Conferencing – Four Pillars

Irrespective of whether an organisation is implementing a top-end immersive telepresence suite, a room-based system, a desktop unit, a laptop or a tablet, the four pillars of effective video conferencing need to be observed for maximum success.

Room Design – Purpose-built rooms are a luxury but simple common sense would suggest avoidance of glass surfaces that reflect rather than absorb sound. Natural light can be the enemy as it is so unpredictable and care should be taken to try to keep the eyes as parallel as possible to the line of the camera. This is even more important for desktop, laptop and tablet users who often neglect the camera position resulting in some very unflattering results!

Equipment – Video conferencing equipment today is generally of very high quality but consider adopting an “open standard” approach to ensure interoperability with as many systems as possible. Try to consider who you will conference with – another office(s) within your network or clients and suppliers perhaps. TV Displays are thankfully coming down in price so a good choice is available. Don’t neglect a quality mount that can be adjusted once installed, particularly if you are considering a dual display system.

Network and Security – Bandwidth is becoming cheaper and more available and video codecs are becoming more powerful enabling video to be carried by less than perfect networks. Video is however, a bandwidth-hungry application requiring quality uninterrupted bandwidth although systems today regularly connect a full HD call at a little over 512k. Within the network the solutions are relatively easy to set up but care should be taken when communicating with participants outside of your own network.

User Adoption – In order to recoup any initial investment the organisation must make every effort to involve all employees and explain the benefits of the new technology. Ease of use is often overlooked and is a vital component for success. Users should be actively encouraged to use the new collaboration tool and be able to see the results – the reduction in costs, the amount of time saved and the tonnes of carbon saved from our atmosphere.

Conclusions

The benefits derived from implementing a video conferencing culture are not just confined to the obvious reduction in bottom line travel costs or reclaiming wasted travel time. Managed correctly, it will encourage users across organisations to collaborate and work more closely together. It will speed up project delivery and decision making. It will be easier for staff to schedule real-time meetings instead of having to factor travelling time into a busy diary. It will allow key staff to spend more quality work time at their local office avoiding the non-productive hours away from their desks making a big contribution to the employees' work/life balance. Many clients will benefit from more regular contact with their suppliers and customers, improving business relationships by meeting more regular avoiding the necessity to factor-in lengthy travel times. For those businesses who take the environment seriously (isn't that everyone?) adopting a video conferencing culture will make a massive contribution to carbon reduction.

We can prepare as best we can for the times ahead, but by implementing video conferencing we will reduce costs, improve productivity, help employees with their work/life balance and make a contribution to our environment. We will also be better prepared to avoid the unknown disruptions waiting around the corner as those who suffered travel problems caused by environmental and industrial issues will remember. With payback times measured in months not years is there any reason why video conferencing shouldn't be adopted?

About i-Klarity

We provide the latest standards-based High Definition (HD) video conferencing and audio visual products and services from the major manufacturers. We will consult, design, implement and manage the latest personal, room telepresence and audio visual services at your offices around the world enabling your employees to use the power of video to avoid unnecessary journeys helping businesses save costs, save time, collaborate more effectively and contribute to a better environment.

For more information please visit www.i-klarity.co.uk or contact us by emailing enquiries@i-klarity.co.uk

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