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Grow your business with Unified Communications and Telepresence

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1 Executive Summary

Ten years after the Internet bubble 'burst' and the future of the internet was cast in doubt, we stand at the tipping point of a new communications revolution that will transform businesses around the globe. Telepresence and the convergence of voice, video, data communication and Intelligent Network services into "Unified Communications" (UC) will revolutionise how we work, where we work, the effectiveness of how we work, and the competitiveness and day-to-day running costs of all companies that embrace this new wave of technology.

This report examines how UC and telepresence can revolutionise business, and discusses why Enterprise and SMEs considering investing in UC or telepresence should be extending the discussion beyond the traditional target group of IT, networking and telecommunications managers to include other internal stakeholders such as CEOs, HR Managers, Marketing, Product Managers, Business Continuity Officers, Operations Managers and Finance executives. By understanding the benefits UC and telepresence could bring each of these stakeholders, it is possible that the extended organisation could contribute to a common budget leveraged for purchasing UC and telepresence solutions from which they can all mutually benefit.

2 Introduction

In 2001 the "internet Bubble" burst, and for many, the dream that was the Internet- a single, all encompassing global web of IP based communications- lay in question.

However, the causes that led to the rapid expansion and subsequent implosion of the internet dream had more to do with a lack of understanding of pricing models for internet based solutions and over-zealous stock market vendor valuations than any real underlying technology issue.

In fact, it could even be argued that the bursting of the internet bubble indirectly led to its current day success, allowing new investors to step in and help technology vendors to merge, partner and grow, and forcing service providers to respond by re-organising themselves into a smaller number of key operators that offer greater geographical scope, enhanced interoperability and greater quality of service.

With a robust infrastructure in place, service providers have been able to start building predictable revenue streams. These have been made possible by services, applications and value added services based upon the managed transport of IP-data across Internet infrastructure, such as VoIP/ IP Centrex/ file-sharing/ data warehousing/ security services (anti-virus/ anti-spyware in the Cloud), video rental-media services, and virtualisation-based applications.

However, only recently have further advances in technology finally realised the promise of combining voice, video and data traffic together to enable effective new business services for Enterprise, SME and residential customers.

The wait, however, has been worth it.

The reality of Unified Communications and telepresence is proving to be far greater than the sum of its component parts, and the effect that it can have on business is truly revolutionary.

This report shall explore the basis of the claims that UC and telepresence have the ability to transform a business, and show how upon adoption the benefits of UC and telepresence can be felt throughout an organisation.

3 What is Unified Communications and Telepresence?

The fundamental tools of almost every business are the telephone and the computer, as a means to create, access, analyse and share business data.

The need and desire to share data with colleagues, partners and customers is facilitated and simplified through access to the internet, which acts as a portal to the world for information gathering and distribution. Historically, when colleagues, partners or customers wished to meet together to discuss data, opportunities or business issues, they would either meet together via audio-conferencing, or physically travel to meet together face-to-face.

With the introduction of internet connectivity at optimised bandwidth speeds, recent advances in technology have enabled participants across multiple locations to connect together and share data online in virtual meeting rooms. Participants are able to project video images of themselves, viewed simultaneously by others with voice and shared data information, all captured and presented in High Definition (HD). Via telepresence participants can now see and hear each other in such detail that participants can establish rapport with each other, even though they may be thousands of miles apart.

Work environments are now transformed through telepresence and Unified Communications: the simultaneous consolidation of voice, video and data sharing into IP connectivity that spans desktops, conference rooms, mobile devices and remote sites, interconnecting presence-aware business applications for voice, video, data, web and instant messaging.

As integrated cameras, microphones and wireless connectivity become standard communication enablers, one of the promises of UC is that

the laptop/computer/ tablet/ becomes the central hub of all business applications, through which voice, video and data is shared. Employees, either office based or mobile, are immediately able to locate and determine the availability of colleagues throughout the world. At the touch of a button, individuals can connect to each other through a variety of multi-media: Instant Messaging (IM)/ text-messaging, voice (through VoIP, fixed line or mobile), or video. Colleagues can choose to share desktops, can share ('push') specific content to multiple colleagues in real-time, or send information packages to each other over the internet.

UC enables businesses with teleworkers or globally distributed workforces to connect with each other and corporate resources at any time, from nearly any location.

Telepresence can be made available as part of a UC solution for individuals, or as dedicated solutions that enable groups of participants to meet with other individuals or groups. Open software architecture allows UC and HD video collaboration to work together seamlessly, across any application, protocol, call control system, or endpoint. Adopting open standards to enable interoperability gives individuals the freedom to choose best-of-breed solutions not just for telepresence, but also instant messaging, presence, call control, Web conferencing, mobile and social video tools. In many situations, these solutions remove the need to physically travel to a distant meeting location, encouraging remote collaboration and communication.

4   How Unified Communications and Telepresence can help businesses grow

With a focus on cutting back on travel expenses, over the past few years businesses have begun to invest in video conferencing systems as an alternative way of conducting meetings that don't require business travel.

With the introduction of HD video, significant improvements in the quality and reliability of the video experience[1,2], along with the cost benefits realised from advanced video compression algorithms[3], the conversation has changed from 'video-conferencing meetings' to 'tele-presence'. The discussion has evolved from cost savings made from simply cutting back on business travel, to evaluating the wider benefits that telepresence has brought to the business as a whole. The positive impact that UC and telepresence will have on businesses will be experienced in many areas, including:-

- Cost reductions
- Enhanced business competitiveness
- Increased productivity and efficiency
- Business continuity planning
- Employee retention
- Reduction in carbon footprint
- Auditing and compliance requirements

[1] Polycom Lost Packet Recovery (LPR) algorithm
[2] Polycom UC Intelligent Core
[3] i.e. Polycom's H.264 High Profile Compression Algorithm

4.1 Cost Reduction

For businesses to benefit from UC and telepresence they will have to invest in new technology and services. As the world emerges from recession, any decision to invest in new technology by a company will only be undertaken after careful scrutiny of the business benefits to be gained from such an investment. However, the promise of UC and telepresence technology is that, not only can it benefit all areas of the business, but from the moment it is installed, companies can begin to enjoy significant cost savings. Reduced operating expenses will not only generate a faster return-on-investment, but will then also continue to facilitate significant savings to positively impact the bottom line for many years to come.

Although each business model is different, typically, cost savings can be enjoyed in the following areas:

- Telephony charges
- Business travel expenses
- Training costs
- Recruitment costs
- Staff costs
- Real estate and facilities costs
- Streamlined communication support costs

4.1.1   Telephony charges
Meetings conducted over telepresence or initiated and run through desktop UC solutions integrate the transport of voice alongside the video data. Companies no longer need to pay for separate conferencing lines and 'on-net' calls to other company employees or federated partners are free. By using UC-enabled video software such as Polycom's m100 video software PC client, Polycom's CMAD software, or Microsoft Lync, employees can simply click on an extension number in an employee directory and connect with a colleague over VoIP, activating video as part of the call if desired. In other words, the pure desktop land-line telephone is slowly becoming obsolete.

4.1.2   Business travel expenses
With telepresence, the rationale for having to travel to most meetings is now removed. For most businesses, HD telepresence allows participants to conduct business meetings without physically having to be in the same room together. Such business meetings can be conducted without companies having to pay for train fares, car hire, airfare, and other associated expenses.

Instead of companies investing in the travel industry, they can now use money saved to invest in their own future.

4.1.3   Training costs

A key cost of any business is training staff. Significant costs are incurred when it is necessary to bring employees together for training, resulting in expenditure on travel, facilities, food and other amenities. Many businesses are finding that video conferencing can be used to train staff without physically needing to bring them together at one location. Furthermore, training sessions conducted over video conferencing can be recorded and then later utilised for training new staff members on an ad-hoc basis as required.

4.1.4   Recruitment costs

For some businesses, the cost of recruiting staff can be significant. Telepresence enables HR and the respective business departments to reduce the costs associated with hiring-managers needing to travel to different locations to conduct interviews. Some businesses are also finding that video conferencing enables them to simplify and speed up the whole recruitment process: telepresence interviews create less demand on an executive's work schedule, are easy to arrange, and no longer require busy executives to travel internationally to meet with candidates in the final stages of the recruitment process.

By shortening the interview process, companies can help ensure they quickly attract and acquire key talent ahead of the competition.

4.1.5   Staff costs

When a company encourages a culture of business travel, it commits valuable resource to being out of the office and less productive during travelling times. When this experience is repeated often throughout the company, resources become unproductive for lengthy periods of time. In some businesses, additional staff may be required to compensate for the unavailability of resources resulting from the staff who are travelling.

An additional advantage for companies that utilise telepresence and UC as part of a home-working strategy, is that home-based employees may feel comfortable working from home for example, when suffering with a cold or other forms of sickness, whereas they would be reluctant to travel to an office. Employers who choose to empower employees with the option of home-based video conferencing/telepresence capability, may therefore record less sick leave from employees, and thus benefit from the strategy.

4.1.6   Real estate and facilities costs

In recent years the costs associated with renting and maintaining office space has encouraged businesses to introduce work from home policies as part of a strategy to reduce operating costs. The advantages are clear: as more employees work from home, the amount of real-estate required by businesses for office space and car-parks decreases. In some cases, companies that rent office space may be able to relocate to smaller, cheaper facilities, and others that own their land and buildings may be able to downsize and sell resources that then generate additional cash-flow.

4.1.7   Streamlined communications support costs

A further advantage in deploying UC and telepresence capabilities within an organisation can be found in the cost savings generated by moving to a common platform for multiple forms of communications. Companies will benefit from a simplification of the management systems and resources needed to support business communications, as well as saving costs from maintaining several different 3rd party systems. In addition, if a company subscribes to a UC or telepresence service offered by a service provider, the business may eliminate ongoing capital investments and switch to a predictable, monthly subscription fee.

4.2 Enhanced Business Competitiveness

One of the distinct benefits UC & telepresence brings to a business, particularly when other companies in a vertical market have not yet adopted the technology, is a demonstrable competitive advantage.

Video conferencing has the potential to revolutionise how some businesses function by:

- enhancing product quality
- improving internal and partner communication and information sharing and exchange
- improving client relationships
- shortening time-to-market
- decreasing costs, improving profit margins and enabling companies to offer products at competitive prices that rivals can't match. Thus helping gain market share without reducing net profits.

We will look at each of these benefits briefly.

4.2.1   Improving internal and partner communication and information sharing
Businesses revolve around information. UC and telepresence enables employees to share information easily and more frequently, enabling them to shorten decision making cycles, speed up product development and collectively overcome any business or product issues.

4.2.2   Enhancing product quality
Key decision makers who are linked together via video conferencing can quickly review product development cycles with manufacturers and suppliers, easily brainstorm ideas, share feedback, discuss and more quickly resolve any issues associated with product manufacture.

4.2.3   Improving client relationships
Businesses can use telepresence to improve client contact, deepen key relationships and build long term partnerships. Some businesses can even offer video-enabled services to clients that connect consultants and experts directly with customers who require personal consultation, e.g. banks providing online remote video consultancy between financial advisers and customers, or doctors who may provide online video consultation services with private clients in the comfort of their own home.

4.2.4   Shortening time to market
In an evolving global marketplace, the speed of the go-to-market model is heavily dependent on the partnerships established with the vendors who make up a business's supply chain. UC and telepresence brings key decision makers together at the touch of a button. Communication flows, issues are overcome, project life cycles are shortened, and products arrive in the market place sooner.

4.2.5   Reducing product costs, improving margins, providing pricing flexibility and increased competitiveness
As discussed above, telepresence enables companies to make operational savings throughout the company. In many businesses, costs and expenses are attributed to the products and the business units to which they belong. As the above costs and expenses attributed to these products decrease, the base cost of the product decreases. Operational savings therefore translate into decreased product costs, enabling companies to be more flexible in market pricing, and ultimately enabling them to either undercut competitors and grow market share, or increase their profit margins.

4.3 Increased Productivity and Efficiency

UC solutions simplify how employees communicate with each other. Integration of desktop data applications with voice and video connectivity enables employees to easily locate each other and determine a colleague's availability (presence), schedule meetings together and share information, all through a desktop, laptop, desktop telephone console[4] or mobile/handheld device (PDA/tablet).

In contrast to physical meetings which can be cumbersome and time consuming to arrange, UC and telepresence makes arranging meetings simple. The simplicity of the process becomes a natural part of daily activities, enabling employees to easily schedule multiple meetings in a single day. Calls can be scheduled back-to-back, such that seconds after ending a meeting with a customer in New York, an employee can be in an internal meeting with colleagues in France, Singapore or wherever else is required. In comparison with physical meetings that require individuals to move from one location to another, the time spent between UC and telepresence meetings can be measured in seconds, and the distance travelled in between attending one international meeting or another can equate to 'zero'.

UC and telepresence offers unparalleled flexibility for both the employee and the employer. If a meeting is cancelled at the last moment, rescheduling can take less than a minute, and no time is lost or expenses incurred in physically travelling to a meeting that does not take place. If a meeting is delayed, there is no panic to re-arrange flight schedules or find another hotel for the evening. And if, during a video conferencing call, it is decided that it may be necessary to invite another participant to join the conversation, another meeting will not need to be rearranged if the new participant can simply dial into a video-bridge and instantly participate in the meeting already underway.

An added benefit of the technology is that meetings can be recorded and replayed later at the convenience of participants not able to attend the original live conferencing session.

4.4 Business Continuity Planning

Corporations and businesses, large and small, must now plan regularly to ensure that in the event of a natural disaster or other severe extenuating circumstance, their businesses are able to continue to function. Some businesses see this as a matter of survival, whereas others see this as a market opportunity: the possibility of growing market share whilst the competition is handicapped or thrown out of action.

In recent times, there have been several examples of when business travel and business operations have been either halted or severely restricted: SARs; 2001/international terrorism; Swine Flu; the Icelandic volcanic eruptions; airlines and travel companies going bankrupt due to the recession, leaving thousands of employees stranded abroad; national strikes or civil disruption.

Many governments already use video conferencing as a central part of their disaster planning, and not surprisingly, an increasing number of companies are now also viewing UC & telepresence as an essential part of their business continuity plans. Such companies are looking at enabling their offices to be better connected with each other and to their partners, and are enabling staff to have home-office/remote-working capability so that when travel to the office is not possible, employees can continue to be productive from home or alternative locations.

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[4] i.e. Polycom VVX 1500.

4.5 Employee Retention

It is anticipated that over the next few years, UC and telepresence technology will challenge many of our traditional concepts of work environments and employment.

UC and telepresence empower businesses to promote home-working. Whilst becoming more efficient thorough the enablement of UC and telepresence, home-based employees can benefit from increased flexibility and a significant change in lifestyle. Home-workers are able to avoid rush hour stress, spend more time with family, and enjoy a more comfortable working environment. Where employers are also flexible on working hours, employees can further benefit from being able to choose which hours to work: e.g. a longer lunch-hour during the summer may compensate for working later at night, ...or starting work at 5 a.m. to participate in a video call with customers/ colleagues in Asia might allow for an early afternoon finish and a free evening.

Having adopted a strategy of home-working that employs UC and telepresence, some companies are now even challenging the whole definition of 'home-working', and embracing the concept of 'Location Liberation'. If an employee is no longer office-based, in an increasingly virtual world, does it really matter where the employee works from so long as he/she works the agreed hours and fulfils

the role for which they are employed? With modern communication technology that defies the boundaries of distance, cost and time, is the location of where employees work from actually still relevant?

In a virtual world where wireless, radio, and high-speed internet access is being made available almost everywhere, does it matter if a UK employee actually works in France or Greece? Or if for a month every year, an employee moves his virtual office to the grandparents house so that the children can spend more quality time with the extended family without leaving 'mummy' or 'daddy' at home?

UC and telepresence transforms the environment in which employees work, and employers who wish to differentiate themselves from their competitors and provide competitive work environments will increasingly adopt the 'Location Liberation' theme as a way of attracting and retaining talent.

4.6 Reduction in Carbon Footprint

Governments are coming under increasing pressure to tax, regulate and control various forms of travel in order to cut pollution and green house gas emissions, in addition to reducing congestion and pressure on transport infrastructures. Companies that embrace UC and telepresence for meetings or home-working make an immediate contribution to reducing their own carbon footprint.

4.7 Meeting Auditing and Compliance requirements

Increasingly, meetings and interactions that have taken place via UC and telepresence are becoming a recognised legal form of electronic record. Depending upon the extent of information that a company is willing to record and store, by being able to show what communication took place, when, with whom, by whom, for how long, and what content was shared, discussed and agreed, along with who viewed which recorded meetings, and for how long, companies will be able to rely on recordings to help meet the growing number of government regulations and compliance requirements.

5 How the power of UC and telepresence transforms buying decisions within businesses

As shown above, the impact of UC and telepresence within a company is far reaching, profoundly affecting multiple stakeholders of a business:-

CEO: UC and telepresence increases the competitiveness of an organisation in almost any vertical market. Chief Executive Officers embracing UC and telepresence are often perceived to be leading edge and forward thinking, which may be reflected in positive share price valuations.

CFO: UC and telepresence helps the Chief Financial Officer by reducing costs associated with travel, IT management, real estate, product development, marketing and HR (...to name some, but not all of the departments that telepresence can help.)

Product Managers: By reducing travel budgets associated with product lines, base costs associated with products are reduced; product development cycles are reduced, product training internally and with partners is simplified, products are launched faster and with more flexibility in pricing.

Business Continuity Managers: UC and telepresence enable people to work from anywhere, anytime. When travel to work or to meetings happening abroad is not possible, UC enabled companies thrive while competitors are grounded.

Human Resources: UC and telepresence shortens recruitment cycles, thus allowing the HR function to better support the business. UC and telepresence enables flexible working.

Operations Managers: By empowering home-workers, UC and telepresence decrease office overheads, reduce real estate requirements, and provide enhanced flexibility in choosing where to locate or relocate an office, with options to generate needed revenue by selling unwanted real-estate or rent new offices at reduced rates.

Project Managers: Using UC and telepresence, project managers are better empowered to facilitate projects, with technology that enables them to easily contact, monitor and manage people and milestones.

Marketing Managers: UC and telepresence enables marketing managers to develop closer relationships with sales and customers, and more easily develop and share new marketing messages and programs.

Sales Organisation: UC and telepresence helps Sales build closer relationships with partners and customers, by facilitating easier communication and information sharing. As cost savings enable more flexibility in pricing, sales departments are able to close more deals and sales organisations benefit from increased sales and enhanced compensation.

CIO: UC and Telepresence streamline communication, simplify management requirements and empower organisations with technology that is state-of-the-art.

Training Managers: UC and telepresence revolutionises the task of training staff and managers. New hire training, product training, certification training – in fact, any form of training, can now be conducted remotely, recorded and replayed as required, available at the touch of a button.

Legal and Compliance Officers: Increasingly, UC and telepresence meeting recordings allow company officers to demonstrate compliance to government and industry regulations. Company legal officers may also be able to use recordings of meetings to later prove what was agreed and discussed between participants in contract negotiations and business meetings.

Historically, the decision to purchase technology such as UC and telepresence would most likely have been made by the IT or Network Managers within an organisation. However, with the benefits potentially now extending beyond IT to all departments of an organisation in an Enterprise or SMB/SME, it is suggested that the decision and budget to purchase a solution may be made possible by pooling resources, allocating funds for the purchase of the technology from funding that comes not just from the IT budget, but from all departments who will mutually share the benefits. Indeed, there may be circumstances where the CIO has no budget available, but the decision to purchase UC technology is entirely driven by another department.

6. Summary

Unified Communications and telepresence will revolutionise the way companies and employees communicate, changing where we work, the effectiveness of how we work, and the competitiveness and day-to-day running costs of all companies that embrace this new wave of technology.

It is suggested that Enterprise and SMEs interested in UC and telepresence should extend the discussion beyond the traditional group of IT, networking and telecommunications managers, introducing CEOs, HR managers, Marketing, Product Managers, Business Continuity Officers, Operations Managers and Finance executives in to the conversation, all of whom either influence or can contribute to a common budget for enabling UC and telepresence and from which they will all mutually benefit.