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From assessment to deployment:
Best practices for enterprise
UC&C productivity

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UC&C CAN PLAY AN IMPORTANT ROLE IN **IMPROVING HOW A BUSINESS COMMUNICATES AND INFLUENCES** PROSPECTS, CUSTOMERS, BUSINESS PARTNERS, STAKEHOLDERS, AND EVEN ITS OWN WORKFORCE.

INTERVIEW IN SYDNEY, CLIENT MEETING IN PARIS, MET NEW STARTERS IN LONDON & WENT BACK IN TIME WITH AN OLD FRIEND. **ALL ON THE SAME DAY. FACE TO FACE.**

One of the distinguishing marks of a highly successful business, regardless of size or industry, is how well it communicates with prospects, customers, business partners, stakeholders, and even its own employees. Additionally, successful organisations distinguish themselves by their ability to collaborate on projects and ideas, which often entails working with the above groups across different geographies and time zones where work is defined as an activity and not a place.

Subsequently, the concept of doing business "in person" has evolved to now include HD video communication – via conference rooms, personal workstations, and mobile devices – as an essential part of that experience. "Today, smartphones and tablets have larger screens, touch-based user interfaces (UIs), location support, broad network connectivity, enhanced cameras and video support, voice over IP (VoIP), and so on," says Monica Basso, research vice president at Gartner. "Such features enable a range of applications – both traditional and new – for employees to better communicate, collaborate, socialise, create and consume content."

In addition to individual communication skills, technology plays an increasingly important role in enabling effective corporate communication and collaboration. The limitations of the traditional PSTN (public switched telephone network) have been replaced with Internet-connected systems that incorporate voice and video capabilities and provide users with collaborative features such as screen sharing, instant messaging (IM), and more. These cloud-based services are leading to new work trends such as hoteling, which is the practice of providing office space to employees on an as-needed basis, rather than using the traditional, constantly reserved basis. This reduces the amount of physical space businesses need and lowering overhead cost without sacrificing access to office resources. Virtual offices are becoming more real every day, too. In a typical virtual office model, all employees work remotely and access a company's web-based intranet, applications, and collaboration tools. Some service providers now offer virtual office solutions that provide clients with a virtual postal address, phone, fax and other services.

What all these trends share in common is the need for rich real-time visual communication between subordinates and managers and among team members.
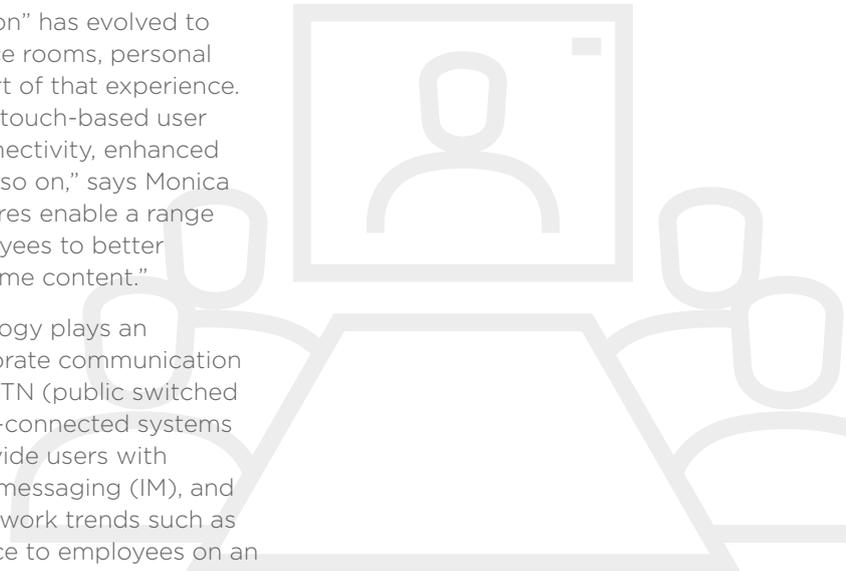
Some businesses that learn to utilise these unified communication and collaboration (UC&C) technologies report significantly reduced business expenses as well as shorter sales cycles, quicker project completion times, and higher levels of customer satisfaction. But for others, the opposite is true. Poor voice or video quality, incompatibility problems, and application unreliability lead to meeting delays, breakdowns in communication, and an overall frustrating experience among employees and customers.

In this whitepaper, we'll take a closer look at common UC&C technology and usage challenges as well as best practices to gain the maximum benefits UC&C has to offer.

COMMON CULPRITS OF UC&C PRODUCTIVITY LOSS

When the right UC&C systems are in place (and properly configured and managed), users enjoy a high-definition visual experience combined with clear two-way audio that creates an experience rivaling face-to-face meetings without travel-related expenses and time losses. UC&C also makes use of complementary technologies (e.g. session recording, group input, CRM integration) that enable participants to surpass the productivity achieved during a face-to-face conversation.

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There are, however, several factors that can compromise the productivity potential of UC&C. Following are four common culprits:

1 **Lack of Bandwidth Allocation & Management.** Nearly every application used in the workplace sends and receives packets of information across the network. Database applications, such as Microsoft Access, send infrequent data packets that are just a few kilobytes (KB) whereas multimedia applications such as Microsoft Lync may send frequent packets that are several megabytes (MB). When the combined "traffic" from all applications traversing a network reaches the bandwidth limits, application performance suffers. For some apps such as Outlook, Word or QuickBooks this issue is barely noticeable. However, when real-time communication apps such as Microsoft Lync, Cisco Jabber, or Polycom RealPresence experience bandwidth congestion users immediately notice drops in voice quality, out of sync voice and video, session freezing, and even dropped sessions.

Without a thorough assessment, it's nearly impossible to determine the root cause of a bandwidth-related issue, and some companies mistakenly conclude that adding more bandwidth is the only solution. Oftentimes, the culprit can be employees using bandwidth-intensive applications like YouTube or Pandora. Or, the problem could be a faulty router, overactive antivirus programme, or a myriad of other configuration-related causes.

2. **Legacy Platforms.** In the past video conferencing systems used proprietary platforms and codecs that limited their connections to only other users on the same systems. Over the years, open standards have become more widely accepted that allow users on different platforms and devices to set up personal video conferences. For example, an Android smartphone user and an iPhone user can engage in a personal video session using programmes such as Microsoft Lync, Cisco Jabber, or WebRTC.

Many enterprises are unable to take full advantage of open standards communications due to large investments made in legacy voice and video communications systems. There's no single right answer for every company regarding whether they should replace their legacy equipment with new, open-standard solutions or keep it and use middleware and other workarounds to enable broader communication capabilities. Similar to the first pitfall, a thorough assessment is required to determine the best resolution.

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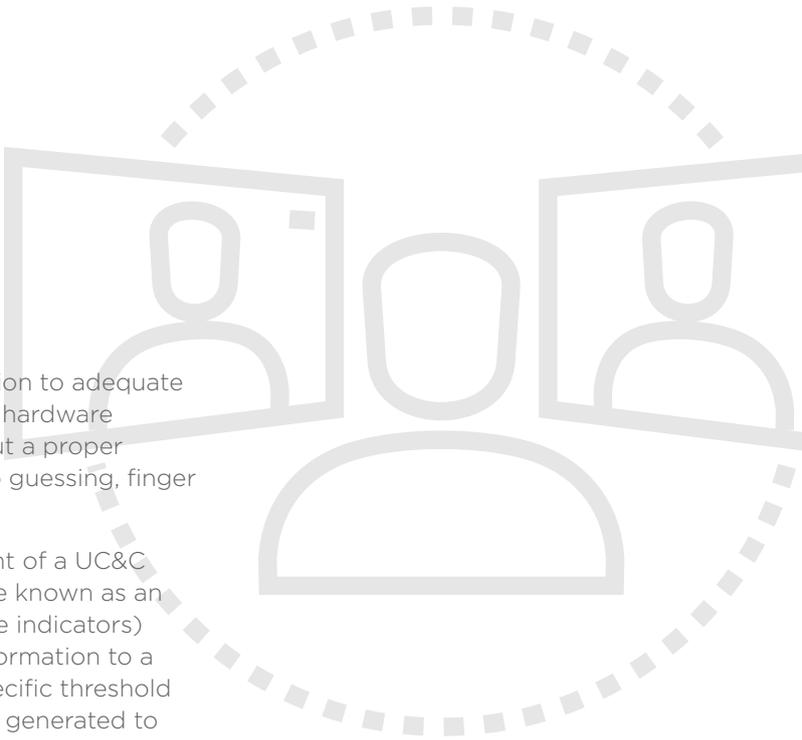
3. **Service Monitoring, Management & Support.** In addition to adequate bandwidth and proper codecs, UC&C requires various hardware and software components to work in harmony. Without a proper management strategy, system problems/errors lead to guessing, finger pointing and wasted time.

    A UC&C management service enables each component of a UC&C system to be monitored by an unobtrusive programme known as an agent, which measures multiple KPIs (key performance indicators) on each component of the system and aggregates information to a central repository. If any KPIs fall below or above a specific threshold (e.g. network traffic exceeds 80% capacity), an alert is generated to a designated internal IT person or outside agency. In many situations, a system problem can be detected and corrected even before users become aware of any issues.

4. **Inadequate Training.** Although open standards have made voice and video conferencing simpler, enterprise communication and collaboration systems are still much more sophisticated than their consumer counterparts, such as Skype or FaceTime. When proper training or instructions are skipped, users often waste a lot of work time figuring out how the system works, they use only a small portion of the systems' capabilities, or they abandon it altogether.

    In some of the more complex UC&C systems, a lack of training can be disastrous. For instance, if a physician isn't properly trained on how to initiate a telemedicine session — or if a nurse is unable to make an otoscope, dermascope, or other diagnostic equipment work with the telemedicine kiosk —it can quickly cause frustration by both parties. After a couple of failed attempts physicians, nurses and patients can lose interest and revert back to "old school" appointments. Only when proper training is included with the rollout of a UC&C system can productivity be optimised and a return on investment be realised.

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PREREQUISITE FOR SUCCESS: A UC&C ASSESSMENT

Conducting a thorough assessment is the only way to ensure the success of your UC&C project. Following is a recommended six-step process based on industry best practices:

Step 1: Conduct Stakeholder Interviews

Many IT deployments fail due to a disconnect between what IT executives thought end users needed and what the users actually needed. To avoid this, it's important to begin the assessment by conducting interviews with several users and identifying:

a. user requirements and challenges

b. line of business requirements and challenges, and

c. end users' requirements and challenges.

This step enables companies to establish a benchmark from which all further assessments will be compared and is the most critical step of the process for developing Use Cases.

Step 2: Perform a Technology Assessment

With the exception of startups, many businesses already have some UC&C systems in place. During this phase, it's important to identify:

a. all systems being used within each department

b. strengths and weaknesses of each one and

c. the pros and cons of standardising on one vendor compared with a best-of-breed solution that combines multiple vendors.

Step 3: Perform a Network Assessment

The network plays a vital role in the success of a UC&C system and potential productivity gains. A thorough network assessment should address the following areas:

a. **Security.** In addition to highly regulated industries such as healthcare and finance, it's a smart business practice to ensure business conversations and trade secrets are protected from unauthorised "listeners."

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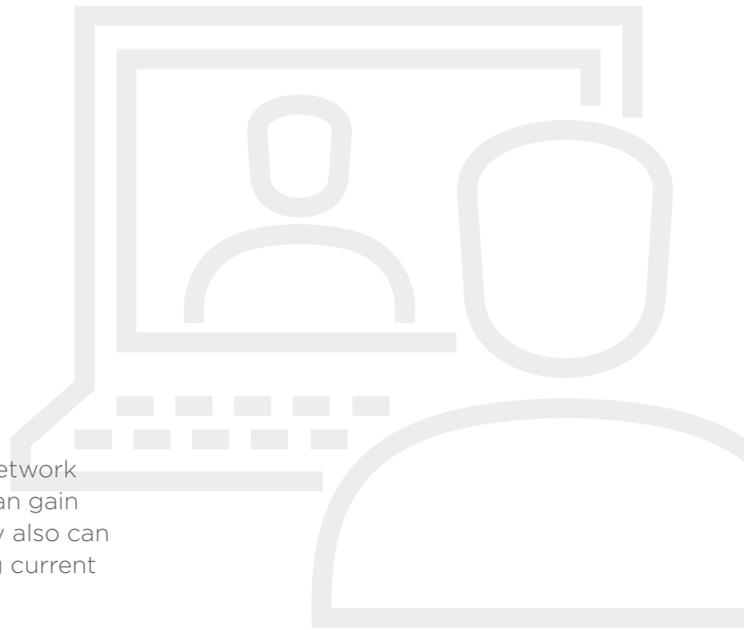
b. **Bandwidth.** By using network monitoring tools to record network traffic use over a one- or two-week period, organisations can gain an accurate view of their bandwidth usage and needs. They also can pinpoint any unauthorised apps that may be compromising current bandwidth availability.

c. **Carrier SLAs.** Due to the high performance requirements of voice and video communication, it's important to assess the carrier service level agreements (SLAs). In addition to the availability or uptime of the network, the carrier should spell out a contingency plan if its network becomes unavailable (e.g. the service could failover to a backup network from another provider).

Step 4: Assess Collaboration Spaces

Assessing the environment(s) where voice and video sessions will be held is an important step that shouldn't be neglected. Specifically, the evaluation should incorporate the following conference room attributes:

a. **Size.** Is the space large enough to accommodate the number of people expected to use it? Will everybody be able to see the video monitor and be seated the proper distance from the conference room microphone?

b. **Type.** It's important to label each collaboration space type (e.g. Group Conference, Personal Video, Huddle Room) so that each room can be used appropriately and the right technology can be selected accordingly.

c. **Location.** Knowing if users will be participating in conferences at home or in a corporate office environment will play an important role in determining the correct UC&C technology used as well as bandwidth and security requirements.

Step 5: Layout Resolution Options

At this phase, users should have enough data points to be able to layout several options. For example, one option may be to consider moving to a single vendor solution vs. a best of breed solution. It's also important to determine whether an on-premise, cloud-based, or a hybrid UC&C solution is the best fit for the organisation. After laying out all options, users can then select the top two or three choices and weigh the pros and cons of each.

Businesses have the potential to gain hours of productivity each week through the use of a UC&C solution. But, there are several pitfalls that must be avoided.

Avoiding [these] pitfalls requires a talented IT staff, a sound business strategy, and cooperation from executives and key stakeholders. Although it may be theoretically possible for an organisation to accomplish all this on its own, there are several advantages to using a third-party expert.

Step 6: Develop an Implementation Roadmap

Once the best UC&C solution has been selected (single or multi-platform), it's important to create a roadmap that takes into account the following areas:

a. **User Interface.** Ideally, all users within the organisation should have a single user interface; preferably one that's widely familiar.

b. **Training** (see 'Invest in Training' on next page).

c. **Integration with Collaboration Spaces.**

d. **Extension into Core Business Apps.**

e. **Connecting Externally.** Connecting to people inside your organisation is powerful, but being able to connect with customers and suppliers is what makes UC&C a game changer. Using technology that is federated is the key to enabling external communication.

f. **Support.** Users will need basic and technical support that's available any time the system is in use to ensure a consistent user experience.

CONSIDERATIONS FOR ACHIEVING OPTIMAL UC&C PRODUCTIVITY

Businesses have the potential to gain hours of productivity each week through the use of a UC&C solution. But, as we've discussed throughout this whitepaper there are several pitfalls that must be avoided. Following are the three biggest takeaways to ensure your UC&C project achieves the highest level of success at the lowest cost and in the shortest amount of time:

1. **Self-Service Does Not Mean Self-Support.** While these two concepts sound similar, they are worlds apart. Self-service refers to the ease of use that enables users to be able to set up conference sessions without IT or other third-party involvement. Self-support, on the other hand, refers to where the burden of troubleshooting the system falls when a problem occurs (i.e. the users or the internal IT staff). As mentioned earlier, the value of working with a third-party expert can't be overstated here.

2. **Don't Take a "If You Build it they Will Come" Approach.** Oftentimes in an attempt to save time, businesses cut corners on the assessment process and make an "educated guess" as to what users need. Be sure to avoid this temptation at all costs and solicit user feedback during each step of the evaluation and selection process. Again, this is why developing a strong set of Use Cases is critical.

> Businesses that take the time to assess their current UC&C investments, identify gaps in performance, and work with a UC&C expert to bridge the gap will significantly increase their chances of realising the full potential UC&C has to offer.

3. **Invest in Training.** In addition to avoiding the mistake of skipping training altogether, it's important to select a trainer that speaks the same language as the users, which often means not having the trainer be the same person who implements the technology. A little hands-on training upfront will pay dividends down the road. It's also important to realise that effective training is not a one-and-done event; after the initial learning phase ongoing training should be included. Not all learning has to be in a sit-classroom environment either. On demand webinars, videos, and even printed collateral that highlights key features, functions, and troubleshooting tips are important components to an effective training programme.

WHY HIRING A UC&C EXPERT MAKES GOOD BUSINESS SENSE

Avoiding the UC&C productivity pitfalls outlined earlier requires a talented IT staff, a sound business strategy, and cooperation from executives and key stakeholders. Although it may be theoretically possible for an organisation to accomplish all this on its own, there are several advantages to using a third-party expert, including the following:

1. **Objectivity.** Choosing a third-party expert that's not affiliated with a specific vendor brings creditability to the assessment process and allows a company to objectively view the strengths and weaknesses of a variety of solutions, which contributes to making informed business decisions.

2. **Expertise.** One of the drawbacks of relying only on one's internal IT staff is that limitations in UC&C familiarity and experience can lead to shortsighted or even faulty recommendations. With a third-party UC&C specialist, on the other hand, you gain the knowledge of multiple experts who are familiar with a variety of UC&C solutions and that have experience deploying dozens of solutions in multiple vertical markets.

   As a word of caution, when selecting a UC&C systems integrator, consultant, and/or managed services provider avoid using a startup company. Even if a new company has vendor certifications and credentials, there's no substitute for the experience gained through years of real-world experience.

3. **Results.** Working with a third-party expert allows you to more quickly troubleshoot problems, select the best solution, and experience the full benefits of UC&C.

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BUSINESSES THAT TAKE THE TIME TO ASSESS THEIR CURRENT UC&C INVESTMENTS, IDENTIFY GAPS IN PERFORMANCE, AND WORK WITH A UC&C EXPERT TO BRIDGE THE GAP WILL **SIGNIFICANTLY INCREASE THEIR CHANCES OF REALISING THE FULL POTENTIAL UC&C HAS TO OFFER** – AND DOING SO MUCH MORE QUICKLY THAN THEY COULD EVER ACHIEVE ON THEIR OWN.

APPENDIX A: DEFINING THE KEY TERMS YOU NEED TO KNOW

One of the sources of confusion among C-level executives, administrators and managers regarding UC&C stems from a lack of familiarity with the industry terms. Before delving into UC&C problems and best practices any further, be sure to check out the glossary below:

Unified Communications & Collaboration (UC&C) – An ecosystem of integrated communication services, such as:

- **Chat/Instant Messaging (IM)** – Real-time communication between two users via computers. Once a chat has been initiated, either user can enter text by typing on the keyboard and the entered text will appear on the other user's monitor. Most online services offer a chat feature.

- **Content Sharing** – Enables meeting participants to view shared documents, whiteboards or applications in real-time from their respective devices and in their respective locations.

- **Presence** – A type of application that makes it possible to identify when a user connects to the network, and whether the user is available, on a call, in a meeting, or busy.

- **Rich Media** – Includes real time communication content such as voice, video, and data

- **Video Conferencing** – Meetings that allow people in different locations to hear and see each other on computer or television screens.

- **Voice over IP (VoIP)** – A combination of hardware and software that enables people to use the Internet as the transmission medium for telephone calls by sending voice data in packets using IP rather than by traditional circuit transmissions of the PSTN (public switched telephone network).

- **Group/Room Conferencing Systems** – Single and multiscreen units that enable groups of participants to partake in a video conference session from the same room. This is in contrast to personal conferencing devices, which only enable one participant to use the technology. Similarly, executive systems are normally used for individual use.

- **Huddle Room Conferencing Systems** – A smaller version of a group room conferencing system, which allows 2-5 people to come together for the purpose of visual collaboration without any rigid advanced scheduling requirements and is more of an ad hoc meeting space.

- **Executive Systems** – Normally these are desktop-based, all-in-one designs that include a display plus an integrated camera and control panel. Executive systems may double as a computer display. System setup typically involves providing only power and network connectivity. Executive systems are often found in offices as well as in small conference rooms (i.e. huddle rooms).

- **Personal Video** – A laptop (client/browser), tablet, or smartphone used for individual conferencing using a UC&C application such as WebRTC, Microsoft Lync, Cisco Jabber, or Polycom RealPresence.
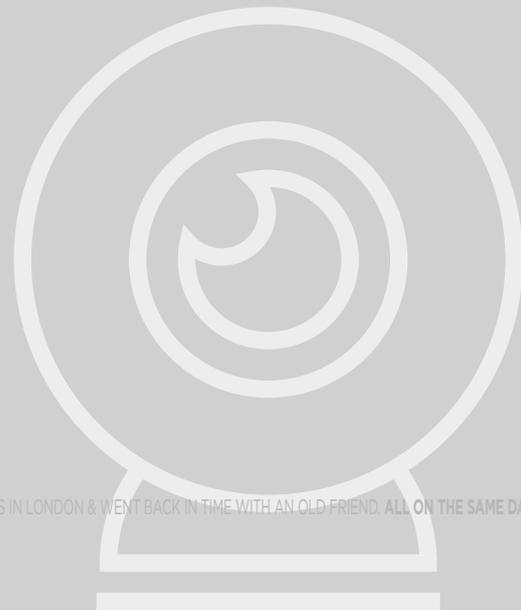
Interview in Sydney,
client meeting in Paris,
met new starters in London &
went back in time with an old friend.

All on the same day. Face to face.

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Yorktel is a leading global provider of video, cloud and managed services for some of the world's large enterprise, government and healthcare customers. Founded in 1985 and with offices throughout the US and EMEA, Yorktel enables customers to successfully integrate video into their operations – from video conferencing to streaming, video event production, to digital signage.

Our core expertise in video communications is in our roots, not an add-on service – making us a trusted partner not only to our clients, but also to our channel partners. Some of the world's largest enterprises, government agencies and healthcare institutions rely on us to take them through their visual collaboration journeys, from initial consult and design to integration and managed services.

The numerous industry awards and certifications, including the international standard for information security management, ISO 27001 are testament to our commitment to excellence. Our goal is to enable and facilitate collaboration – person to person regardless of device or location.

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