

WHITE PAPER

High Quality Network: A Prerequisite for Unified Communication

Sponsored by COLT Telecom

Dan Bieler
September 2009

IDC OPINION

This White Paper is based on the findings of a major survey of ICT decision makers and end users in the UK and Ireland. It underlines several aspects that CIOs should consider when planning a unified communications (UC) solution:

- ☒ **UC is about creating a heterogeneous communications infrastructure:** UC is about human beings. It is not about the formation of one single homogeneous communications infrastructure. End users have clear preferences depending on their gender and age. UC must support various facets of demand for communications with various devices and applications. In order to attain high usage rates of a UC solution — and so boost return on investment — it is essential to address these preferences as well as train end users to use the UC solution.
- ☒ **The majority of end users already perceive IT-based communications as the most valuable communications applications:** Communications end users do not think about the concept of UC. End users use communications to do their job. The survey highlights that end users are technology-agnostic in so far as they already prefer to use communications solutions that are embedded in the wider IT environment of their firms.
- ☒ **A high-quality network infrastructure is a prerequisite of a high-quality UC solution:** Many aspects driving end-user demand for and concerns regarding communications relate to quality of service issues. Hence, network infrastructure matters greatly. Any software-based UC application is only as reliable as the network infrastructure it is based on. Telecoms service providers are well positioned to provide and manage a high QoS network infrastructure with service level agreements.

UC is in most instances a long-term project affecting a firm's communications culture and transforming business processes. Open standards and interfaces are key to attaining such a gradual UC implementation. CIOs should choose a reliable partner as UC provider. This partner should support the CIO to plan and implement a gradual rollout based on modular components of the UC solution. Again, telecoms service providers are well positioned to act as reliable partners for UC projects, given their networking expertise, financial strength, and large partner network with hardware vendors.

TABLE OF CONTENTS

	P
In This White Paper	4
Methodology	4
Definition	4
CIOs' Perception of UC Application Elements	4
UC is Part of the Evolving Enterprise Communication Infrastructure.....	5
Demand	6
Benefits	6
UC Drivers	6
Challenges and concerns	8
Main Challenges to UC.....	8
Implementation	9
UC Implementation and Organisational Readiness	9
Measuring UC Performance	10
Conclusion	12

LIST OF FIGURES

	P
1 UC is Part of the Emerging Enterprise Communications Infrastructure.....	5
2 Opportunities Addressed by UC Solutions According to CIOs	7
3 Main Challenges to UC in the Eyes of CIOs.....	9
4 Actual UC Implementation and Plans for UC	10
5 Key Performance Indicators for Measuring of UC Performance.....	11

IN THIS WHITE PAPER

This White Paper aims to help CIOs develop a sound UC strategy. It is based on the findings of a major survey of ICT decision makers and end users in the UK and Ireland, supported by IDC's existing knowledge of the IT and communications marketplace.

The study compares the vision for emerging communications as expressed by CIOs with the demand for communications solutions as stated by end users inside businesses. The main areas of focus for this investigation into UC demand are devices, applications, network infrastructure, buying processes and communications outsourcing.

METHODOLOGY

As part of the research for this white paper, IDC conducted a survey of 50 end users in companies in the UK and Ireland. The survey segmented end users by gender, age group (20–34, 35–50, 50+), and company size (five groups ranging from SMBs to companies with over 5,000 employees). The survey did not discriminate between vertical sectors. The survey took place between June and August 2009 and was conducted via telephone based on a panel methodology.

IDC also conducted telephone interviews with 50 CIOs in the UK and Ireland based on a panel methodology. IDC discussed demand for UC, use of UC, the potential for outsourcing of UC, and the UC buying process. The interview partners were chosen by IDC, and the discussions took place between June and August 2009.

DEFINITION

CIOs' Perception of UC Application Elements

British and Irish CIOs view horizontal applications as forming the core of UC. PIM and collaboration tools are central to their UC perception. When asked about the main applications that make up UC, British and Irish CIOs rank email, calendaring, contact management, fixed voice, and collaboration management ahead of other applications.

Email was identified as the primary component of a UC solution in the minds of CIOs. They rank email higher than fixed voice as the most important UC application. Mobile voice was identified as being of secondary interest for decision makers when selecting a UC solution. CRM applications are seen as being core to UC by even fewer CIOs. ERP fares worse still, as do Web 2.0 applications.

For the purpose of this White Paper, IDC will define UC as the integration of voice (fixed and mobile), messaging (email, instant messaging, fax), calendar and contact management, and presence functionality. Over 90% of CIOs agree with such a definition.

UC is Part of the Evolving Enterprise Communication Infrastructure

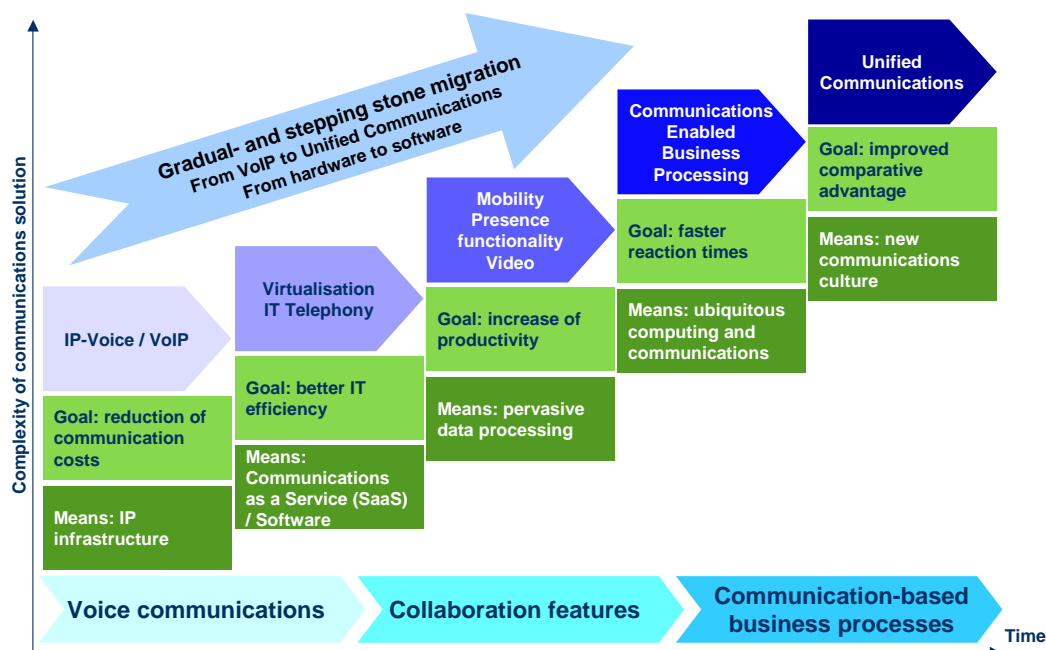
UC is not an end goal, but a means to an end. UC is just one, albeit, very important element in the wider business communication infrastructure.

A Step-Based and Gradual Approach to Communications

As shown in Figure 1, IDC believes in a step-based approach to building the evolving enterprise communication infrastructure. The various building blocks address different needs. Businesses do not have to adhere to these steps chronologically, although one step builds on another.

FIGURE 1

UC is Part of the Emerging Enterprise Communications Infrastructure



Source: IDC, 2009

The further companies move along in developing their communications infrastructure, the more complex the communications infrastructure becomes:

- ☒ **Costs:** During the first phase, companies focus on the convergence of voice and data — i.e., the migration from TDM to VoIP. The main benefit during this phase is to drive telephony costs down and to leverage the converged network. Depending on their original communications arrangements and the level of internal calls, businesses can save 40% to 50% during the migration to IP-based infrastructure, although on average the saving potential is about half that figure.

- ☒ **Efficiency:** During the second phase, companies develop the necessary IT infrastructure to treat communications increasingly like software. The main aim during this phase is to encourage better efficiency through standardized architectures and more-streamlined IT solutions, in particular the server and storage space. Improved efficiency in these areas has the potential to lower operating expenditure by about a fifth on average.
- ☒ **Productivity:** During the third phase, companies introduce both presence functionality and multimedia communications solutions and integrate them with mobility, thereby driving ubiquitous communications. The main goal during this phase is to improve personal and team productivity. Productivity gains are difficult to measure accurately because many are due to soft benefits. But based on discussions with CIOs, we estimate that businesses can improve productivity by up to a quarter due to applications in the collaborative working space.
- ☒ **Responsiveness:** In the fourth phase, companies focus on communications-enabled business processes. Under this scenario, communications are pervasive. The goal is to speed up reaction times of firms through the use of ubiquitous computing and communications. Benefits are particularly difficult to calculate during this phase, as most of them are soft benefits.

DEMAND

UC solutions are of little value to an organisation if end users do not readily adopt them. Therefore, it is vital that CIOs take the communication behaviour and preferences of end users into consideration when selecting a solution, in order to maximise uptake and thus boost return on investment (ROI). ROI is directly impacted by usage, a point that is often underestimated during UC planning and rollout. Hence, firms with UC ambitions need to take into account a variety of demographic factors (age, gender, etc.) and preferences related to job function when implementing a solution.

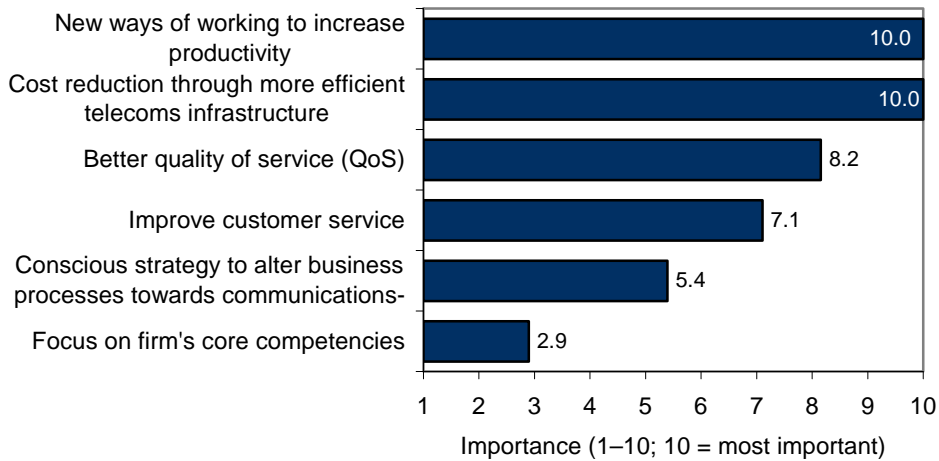
BENEFITS

UC Drivers

IDC believes that CIOs turn to UC primarily to address the short- to medium-term opportunities that UC provides. The most important of these is the deployment of a more cost-efficient telecoms infrastructure as well as pushing for new ways of working to increase productivity, as Figure 2 shows. IDC believes that the macroeconomic financial crisis will accelerate the pursuit of this goal.

FIGURE 2

Opportunities Addressed by UC Solutions According to CIOs



Source: IDC, 2009

Interestingly, the establishment of a better quality-of-service for a company's communications infrastructure and improved customer service has a lower priority. In addition to quality connectivity, this means fewer breaks between various communications devices, applications, and solutions through more seamless communications. Telecoms service providers are well positioned to address the two most important drivers for UC projects due to their deep network management skills.

Integration of Communications and Business Processes

In IDC's view, Figure 2 highlights that the long-term concept of communications-enabled business processes is still in its infancy in the UK and Ireland. This observation represents a disconnect between the end user/CIO and provider viewpoints. Many providers and analysts are preaching the value of UC as an enabler and transformer of business processes. However, this message has not yet been fully recognised or accepted by the target audience.

Although CIOs list short- to medium-term issues as the main reasons for rolling out UC solutions, CIOs do clearly recognise the long-term implications of UC for company communications. More than two-thirds of CIOs, 77%, say that communications will be integrated into their firms' business processes.

Ultimately, the concept of communications-enabled business processes is most likely to alter not only communications infrastructures but also communications cultures. Only one-third of CIOs see the need for communications to be siloed beside other silos like CRM and ERP in the future.

CHALLENGES AND CONCERNS

Main Challenges to UC

There is a major human concern among end users regarding future communications solutions. While end users and CIOs clearly recognise the benefits UC and future communications solutions can deliver, 42% also fear that UC will result in more stress because everyone will have to be available at any time. This fear is most pronounced among older employees (64% among the 50+ age group). It is the responsibility of businesses with UC solutions to introduce UC in a manner that shows the potential to reduce rather than increase stress levels — if used correctly.

As Figure 3 highlights, for CIOs, upfront investments in UC solutions constitute the biggest challenge. The global financial crisis and more pressing calls for greater cost control further underline this challenge. One of the reasons why UC has been slow to be adopted is the lack of a firm cost justification, as UC benefits are a mixture of cost savings and process improvement. For instance, the migration to a converged IP-based network is more efficient to operate and offers the potential for cheaper calls via VoIP.

Moreover, the integration of several UC applications such as instant messaging and presence functionality increases collaborative working and facilitates virtual teamwork. In this case, the benefits show through as productivity gains, say through faster response times, as well as cost savings, for instance through home-working arrangements. It is therefore essential for CIOs to get their total cost of ownership (TCO) and return on investment (ROI) pitch right when discussing the UC solution with the their firms' CEO, CFO or COO.

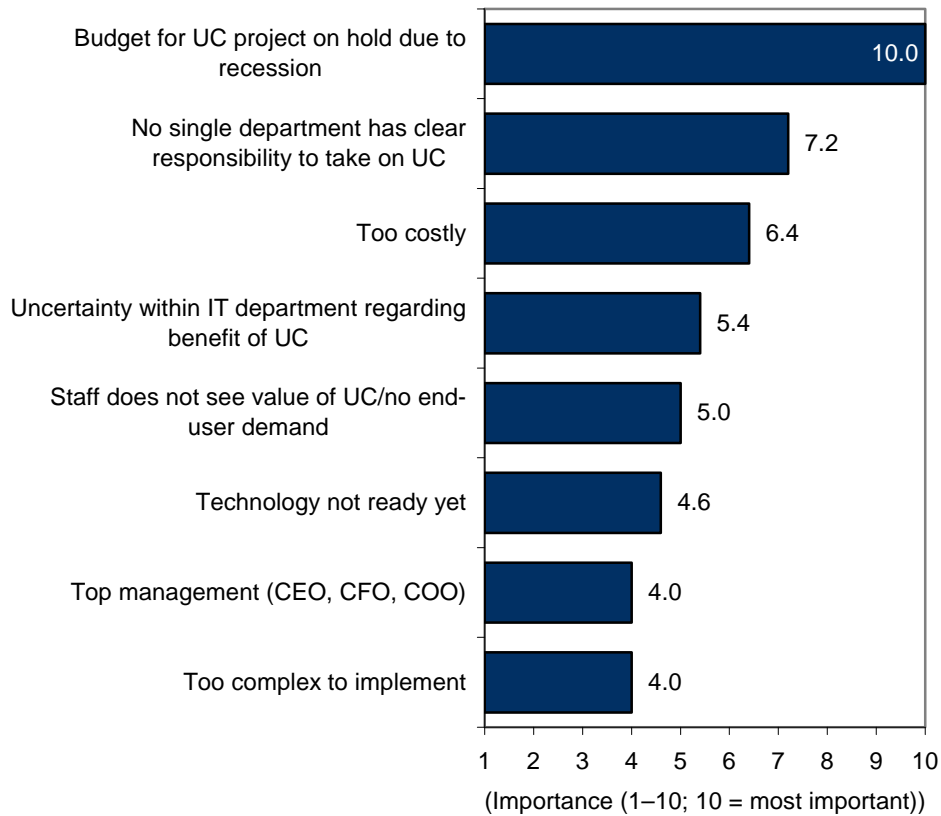
However, if CIOs can provide a credible TCO or ROI story, the headline investment cost of the UC solution can melt into the background. Both UC providers and CIOs have to demonstrate clear business benefits and a lifetime cost of the solution. Moreover, IDC believes that UC providers and CIOs must work on new charging models. IDC sees leasing models for UC — "UC on credit" approaches — as the most obvious way to address the funding challenge of UC projects.

The second most pressing challenge for UC adoption is that no single department has clear responsibility to take on UC. UC providers must therefore work with several levels of decision makers, effectively taking on an intermediary role.

In order to counter low demand from end users, both UC providers and CIOs' must engage in additional education and training that makes UC benefits more explicit and relevant to end users. This form of "UC lobbying" can take many shapes, involving solution road shows, executive events, conferences, roundtable workshops, end-user forums, white papers, or traditional advertising.

FIGURE 3

Main Challenges to UC in the Eyes of CIOs



Source: IDC, 2009

Interestingly, CIOs ranked uncertainty within the IT department regarding the benefit of UC as a real challenge. This demonstrates that even within IT departments, doubts over the sense of UC solutions pose a barrier to UC deployment and adoption.

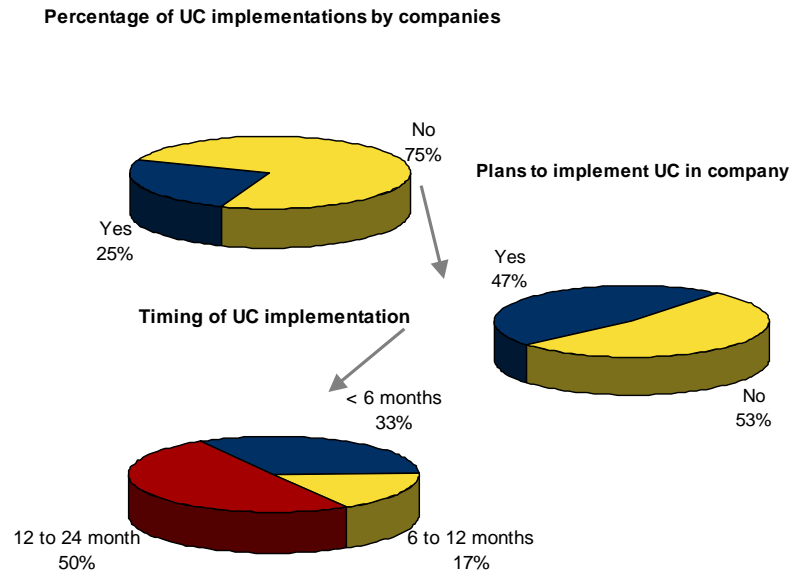
IMPLEMENTATION

UC Implementation and Organisational Readiness

While IDC has seen steady growth of UC installations by British and Irish businesses between 2008 and mid-2009, the total number of businesses that have installed UC remains a minority at 25%, as can be seen in Figure 4. But of the 75% of businesses that report that they have not yet installed a UC solution, 47% have plans to implement UC — and half of those have no short-term plans but a 1–2 year time horizon or longer for their UC rollout plans. Put differently, the tangible potential for UC in the medium term is over 50% of businesses, with the remainder having no concrete plans for UC. UC providers and CIOs clearly need to focus on making a stronger business case regarding the benefits that UC can deliver.

FIGURE 4

Actual UC Implementation and Plans for UC



Source: IDC, 2009

Measuring UC Performance

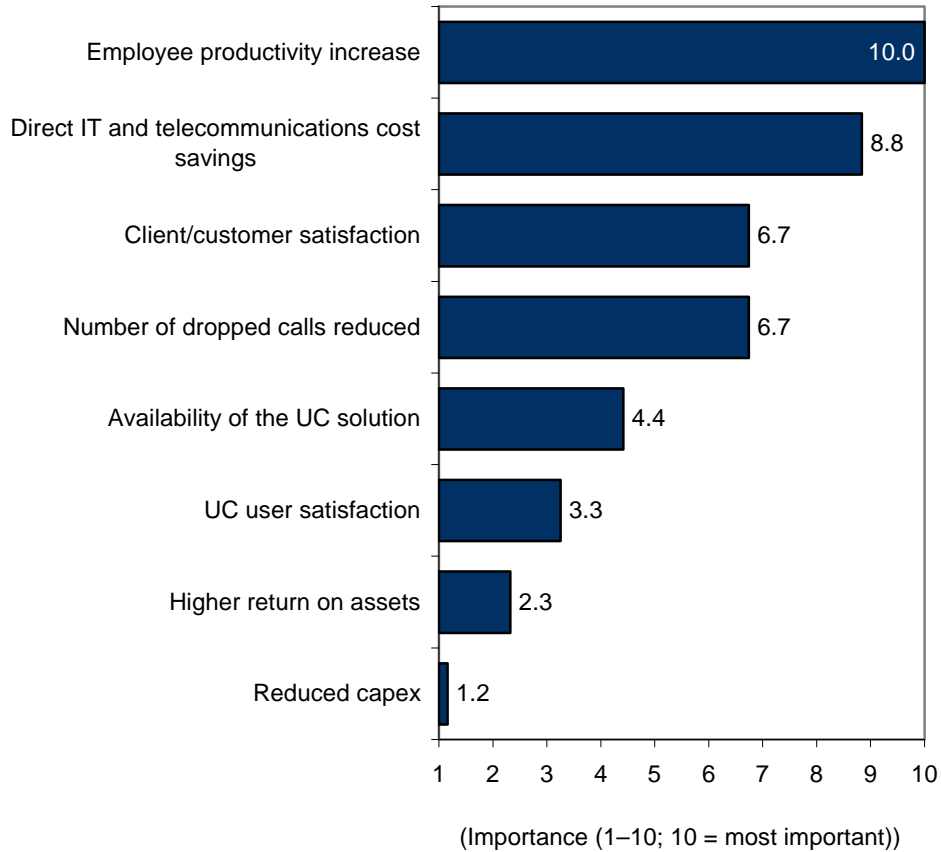
Companies place employee productivity increases ahead of all other key performance indicators (KPI) for measuring UC performance, as can be seen in Figure 5. These productivity increases are of course reliant on a high-quality infrastructure.

Any software-based UC applications are only as reliable as the network infrastructure they depend on. The gradual migration by companies towards an IP-based network infrastructure and the migration towards VoIP means that communications are becoming an integral part of a firm's IT infrastructure. IDC believes that a main challenge for software firms with UC offerings is to meet "traditional voice expectations" of 100% availability. End users will never tolerate the "reboot your phone" approach as a viable way to resolve voice communications issues. Telecoms service providers and telecoms equipment vendors should therefore score well in the "availability of the UC solution" area against UC competition from software firms.

IDC sees this as a key opportunity for telecoms service providers and telecoms equipment vendors to differentiate their UC solutions from those offered by software firms. The end-user expectation for availability of voice communications is set at 100% — the legacy of the PSTN/TDM world.

FIGURE 5

Key Performance Indicators for Measuring of UC Performance



Source: IDC, 2009

Not surprisingly, direct cost savings are also high up on the agenda of measuring the effectiveness of a UC solution. The third most important KPI for measuring UC performance relates to client and customer satisfaction. This is linked to the observation that one of the most important pain points that CIOs need to address is the desire to establish a better quality of service for their company's communication infrastructure. If a UC solution fails, it reflects badly on the brand of the firm using UC. Client-facing UC in this sense is a "mission critical" solution and should not be underestimated by CIOs.

CONCLUSION

UC is about creating a heterogeneous communications infrastructure. End users have clear personal preferences. In order to attain high usage rates and boost the return on investment of a UC solution, it is essential to address these preferences as well as train end users how to use the UC solution.

End users are technology-agnostic in so far as they already prefer to use communications solutions that are embedded in the wider IT environment of their firms. Already, the majority of end users perceive IT-based communications as the most valuable communications applications.

Importantly, a high-quality network infrastructure is the prerequisite of a high-quality UC solution. Many aspects driving end-user demand for and concerns regarding communications relate to quality of service issues. Telecoms service providers are well positioned to provide and manage a high QoS network infrastructure with service level agreements.

UC is in most instances, a long-term project affecting a firm's communications culture and transforming business processes. CIOs should therefore choose a reliable partner as UC provider. Again, telecoms service providers are well positioned to act as reliable partners for UC projects, given their networking expertise, financial strength, and large partner network with hardware vendors.

Copyright Notice

External Publication of IDC Information and Data — Any IDC information that is to be used in advertising, press releases, or promotional materials requires prior written approval from the appropriate IDC Vice President or Country Manager. A draft of the proposed document should accompany any such request. IDC reserves the right to deny approval of external usage for any reason.

Copyright 2009 IDC. Reproduction without written permission is completely forbidden.