

Click to Collaborate

Unleashing the power of unified communications to enable your organization to collaborate effectively

In 1968 Melvin Conway noted that “...organizations, which design systems..., are constrained to produce designs which are copies of the communication structures of these organizations”. Unified Communications and Collaboration (UCC) in the enterprise revitalizes the significance of Conway’s Law, as the network enables lower costs and innovation for organizations, both private and public.

McKinsey stated in their brief, The 21st Century Organization that raising the productivity of employees whose jobs can’t be automated is the next great high stakes performance challenge. This is interesting as much effort has been spent automating business processes. At the same time, globalization of competition and rising customer expectations for product customization and services have put even more pressure on today’s organizations. Leading companies understand that the ability to leverage business intelligence to track and harvest market opportunities through

real-time decisions makes a huge difference. Thus, the tools and the data must be in place for reporting, but, moreover, the people and the ability to share knowledge must exist to make more targeted business decisions, more quickly—the essence of UCC.

Raising the productivity of employees whose jobs can’t be automated is a key business performance challenge, especially against the backdrop of the effort being made to automate business processes. Building on this point, organizations have outgrown standard voice and email as the tools of choice for the enterprise, as they are very inefficient. Today’s decision-making not only involves employees inside the enterprise, but also people and information outside of the organization’s walls, necessitating new methods. Through Conway’s lens, this environment requires the power of a new system, built for today’s business issues and with the flexibility of an open unified collaboration framework.

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What is Unified Communications and Collaboration?

Unified Communications and Collaboration describes the technology and practice of tying groups of people and devices together in real-time across the increasingly globalized work environment, regardless of platform or geography. But what comprises UCC and where are the benefits coming from? Technology vendors include a diverse mix of features from converged / fixed / mobile / voice / data networks, instant messaging, enterprise content management, business video, presence, mobility and emerging social networking—or, more succinctly, all the tools that enable people to work more efficiently.

To truly understand the distinctions, it is beneficial to define the terms.

- ‘Unified’ is enabled by standards and the network layer;
- ‘Communications’ includes voice, email, SMS, instant messaging, and even desktop video;
- ‘Collaboration’ leverages the power of technology in everyday work processes for more efficient interactions. The result can be document sharing, team-building, mobile working, or process automation.

The barriers between content formats, individual tools and devices, companies, and people working toward common objectives are removed. Collaboration and communication are certainly not new, but the process and potential effect are changing.

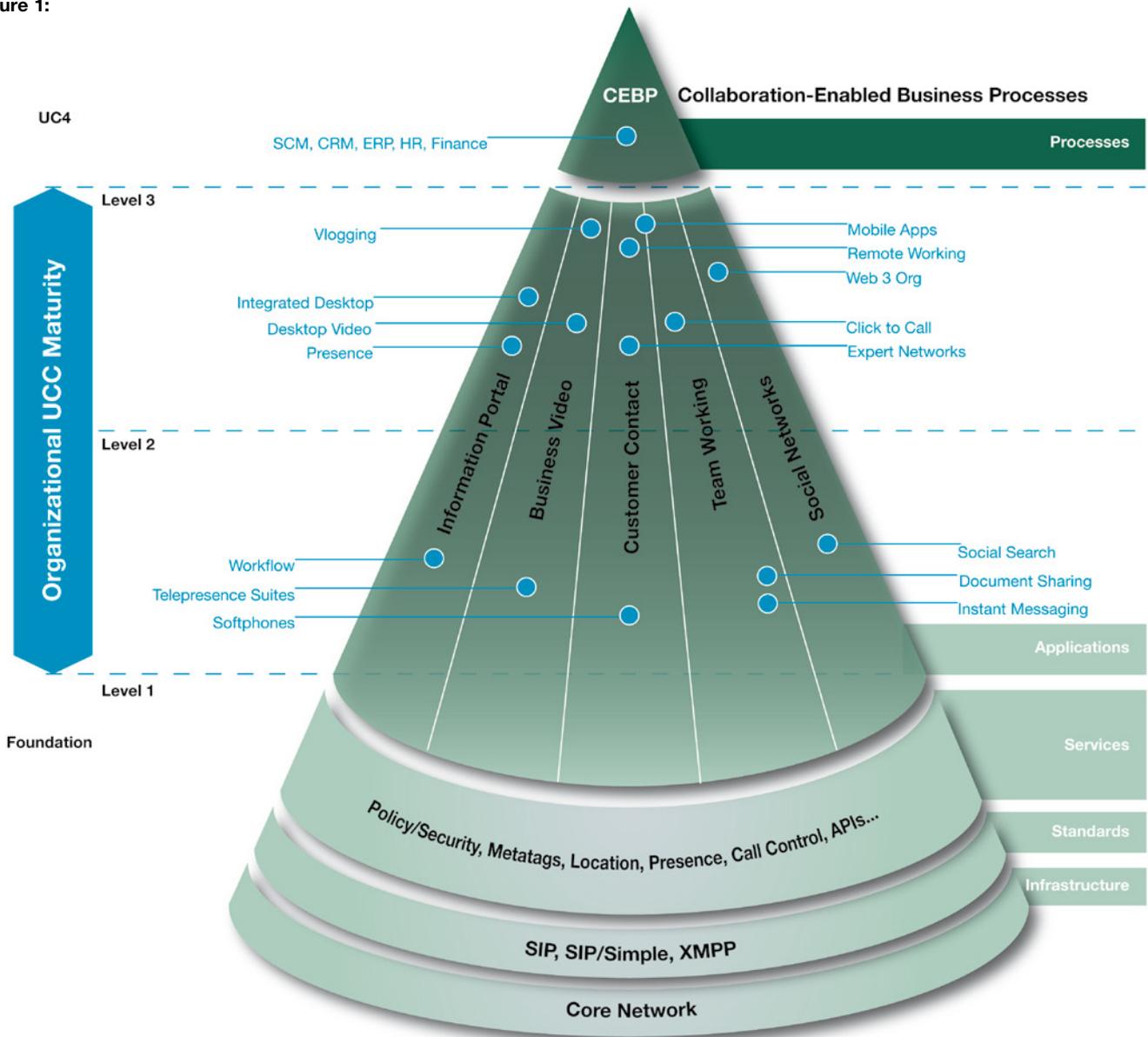
UCC Architecture

UCC supports communications from any device and packetizes the data to deliver it anywhere, any time, and through any channel. Maturing from Unified Messaging or the integration of email and voicemail to be accessed later from a single location, UCC is built on an IP-based transport layer to deliver information and enable interaction between groups and

individuals through unified, simple interfaces and consolidated access numbers for each user, regardless of their location or what device they are using at the time. The end point may not be a person at all, but a smart appliance. This is the ‘Click to Collaborate’ phenomenon—so named because one click of a button brings you into instant contact with the individual or group you need in real-time.

UCC today is enabled by the shift to converged voice and data IP networks. That is, a single network carrying all voice and data traffic. This single network architecture (sometimes called IP telephony (IPT), Voice Over IP (VoIP) or Session Initiated Protocol (SIP)), supports multiple forms of media, where voice calls, video, SMS, faxes, etc., are transmitted via IP LANS and WANS with open standards. The result is IPT providing the foundation for integrating data and applications with voice communications. For instance, users can employ SIP and IPT for ‘click to call,’ turning an instant message session into a voice call. Voicemail is translated easily to email. Web-enabled ERP and CRM applications such as PeopleSoft, SAP, and Oracle will be easily or automatically integrated with the communications system and information will appear on phone-based or screen-based portals. Speech automation is enabled, where people can interact directly with machines and applications via voice. Business processes are streamlined or changed completely via Collaboration Enabled Business Processes (CEBP). Converged voice and data are now simply another application.

Figure 1:



The illustration above shows the maturity phases of enterprises today. At the base level, an intelligent network enables truly unified services, which sit on top. These building blocks, which include security and policy, are designed to operate consistently and reliably, with true functional integrity that ensures their reusability by any application or device connected to the network. Well-defined APIs expose these services to a wide variety of applications, which include

focused business applications and standard communication tools. The goal is to restructure and transform the processes that define how an organization operates. Organizations mature from foundation unified messaging functionality to a joined up state, being called UC4 (Unified Communications, Collaboration and Contact Centers).

Another important perspective is that of social networking technologies, a consumer-led phenomena, enabled by the evolution from Web 1x to

Web 3. Facebook, a platform with real- and non-real-time communications technologies, has 400 million users. Home entertainment and gaming platforms are Wi-Fi-enabled and content is updated via broadband in real-time, connecting users to companies and each other across the globe. Evernote, a collection of software and services that allows users to collect, sort, tag, and annotate notes and other miscellaneous information, ‘remembers everything’ and joins different data types with

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storage in the Cloud, with access from anywhere. And corporate employees are bringing the tools they use at home with them into the workplace.

So what does all this mean for an organization in terms of business benefits? Organizations can save costs through reduction in infrastructure, telecommunications expenses, and systems maintenance. New technology-enabled ways of working give employees easier access to information or the ability to connect to 'expert' colleagues, resulting in saved time and soft benefits in employee retention. Customer- or partner-facing processes can be streamlined to bring new user groups behind the corporate firewall and make the organization more accessible to customers and consumers. These optimized or redesigned processes can enable new products and revenue streams.

And the lessons learned begin to surface: integration of platforms is critical. One of the largest technical issues companies face is the interconnection of products and technologies, including telephony switching (Cisco, AVAYA, Alcatel, Nortel, Siemens, Aspect, etc.). License problems can become an issue when implementing a combination of legacy and digital network technologies. And to further compound complexity, on-premise and hosted buying decisions provide differing commercial and data access models.

How are Organizations Using UCC?

UCC enablement is made up of many complex elements including technology infrastructure, applications, and process change. Bringing to life real examples may help to identify opportunities for future adopters.

Portalizing content is not new. However, portals that include critical business information and UCC technologies (such as presence), help to manage workflow and can provide significant competitive advantage. A UK government department met transformational requirements with an information workplace solution for 4,000 daily users to improve policy making, external communications, practitioner networking, information compliance, and reuse of knowledge. The result is process efficiency improvement of 100% in these areas, enabling faster decisions and enabling the department to refocus employees on new tasks.

Ford is leading automotive sector innovation with its Sync in-car mobile-services platform. Its upcoming MyFord Touch platform can link mobile apps, such as Pandora, with the car's digital screens and voice-control capabilities. Even integrated Wi-Fi is included, for use when the car is motionless. Ford is opening up the platform to third-party vendors, which will increase the application set for drivers and improve customer experience, and quite possibly competitiveness.

PepsiCo is one of many companies taking business video to an immersive level with telepresence multi-screen technology. The structure gives participants the feel of a face-to-face

meeting, even though they may be dispersed across the world. PepsiCo's systems are at major offices across the globe and will have a significant cost reduction impact. PepsiCo's CIO Robert Dixon said in a statement that using telepresence "will reinvent the way we work", while cutting down on travel, which, in turn, improves productivity and reduces the company's environmental footprint.

Proctor & Gamble was an early adopter of business video and, last year, estimated that the consumer products company had 70 telepresence rooms installed over the past two years. With 138,000 workers in 80 countries, P&G estimated it had saved \$4 for every \$1 invested in the systems through savings in travel costs and improvements in productivity. Video offers an extension to current communication technologies such as email. Video blogging (or 'vlogging'), for instance, extends business video from real-time to non-real-time and puts video firmly into the fabric of collaboration technology and process improvement.

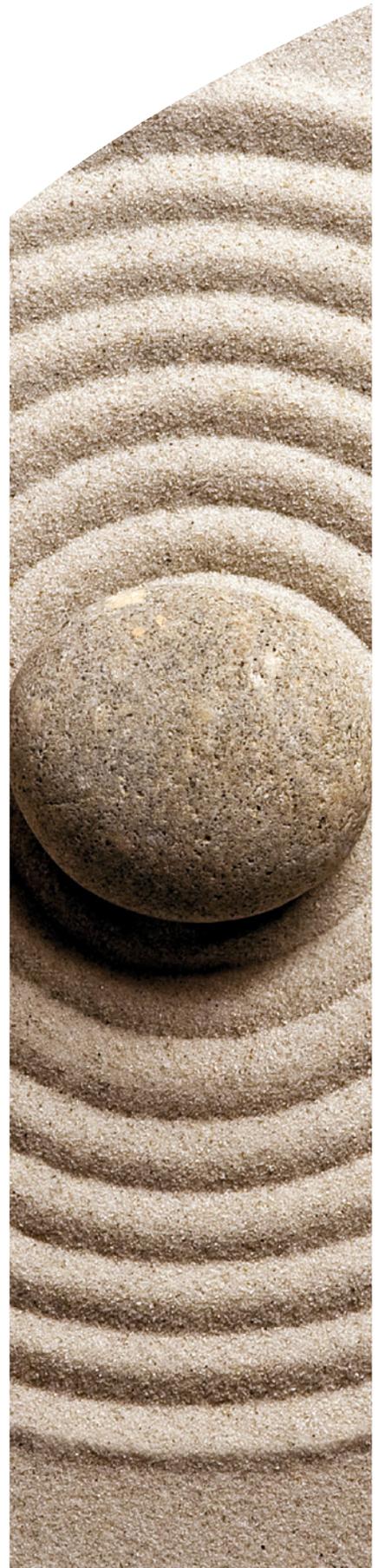
One of the most successful deployments of telecommuting remains JetBlue (US low-cost airline), who started with 48 customer service agents working from home in 2000, had 300 by 2006, and are up to 1,000 today. The cost reductions were staggering from the outset and JetBlue managed workforce issues and systems maintenance with process change, since the original rollout of the program was on dial-up speeds. Reports state that JetBlue has now seen attrition rates drop from over 40% to less than 5%. Today, with VoIP and broadband at home, many of the entry barriers for companies are removed and

companies like Office Depot are joining the trend of home working.

Retail banks and financial services organizations are enabling 'expert networks' by permitting customers to reach individuals with information on how a mortgage product works from their desktop, and are exploring how to allow high net worth customers to access their personal wealth manager from connected gaming platforms or set-top boxes through their home network. In fact, smaller building societies and financial services institutions in the UK are decentralizing customer contact via UCC to better compete with the superbanks.

Companies are integrating presence and voice applications into their ERP investments. A global beverage manufacturer and distributor improved palette-picking in its distribution centers by 40%—by integrating presence and voice capabilities in its warehouse management system, and presence and voice into its transactional system. The result was a 99.8% inventory loading rate and an overall 10% productivity increase, especially in the areas of costly exception handling.

The iPhone and other mobile technologies are an integral piece of the collaboration landscape. In the area of disease control, digital devices enable consumers and health organizations to stay up-to-date on the latest 'flu-related information with a few taps of a button, thanks to the increasing number of iPhone apps, social networks, and informative websites dedicated to the cause. Users can now share information and track other health threats instantaneously.



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Rollout: Analysis and Design

The major challenge to UCC, in the end, is that organizations can often see the functionality and the opportunity, but yet cannot make sense of how to bring it into their infrastructure. It is critical therefore that the right approach is used, and the right guidance sought. There are some proven methods to reduce risk and ensure sustainable benefits.

There are six stages of optimum 'Analysis and Design' that must be considered as the first step in any UCC project:

1. Requirements analysis is vital to identify how an organization's employees work and identify the areas where they could work more efficiently;
2. Process identification or 'Value Levers' are necessary to identify the individual or industry-based process issues (e.g. where revenue-generating opportunities are in mobile sales processes or in working with partners, etc.);
3. Identify expense waste—organizations may have particular issues with travel or slow time-to-market. Identifying the critical areas where their communications are leading to waste is vital in recommending change;
4. Critical worker identification and role reviews are vital, because rolling out UCC to staff who are most in need, or whose contact is most important, is a major first step. Capgemini customers have found that 70-80% of a typical employee's workday is spent in knowledge work and collaboration;

5. Stakeholder involvement is essential to target the department and business units that most need aid and to ensure that the organization's strategic thinkers are informing the process;
6. Mapping the benefits helps to design solutions that lead with the most critical functionality and lead to self-funding programs.

The result of this six-stage first step is a targeted strategy recommendation, a network design, a robust business case, a roadmap for change, prioritization, and a high-level rollout plan. Using an 'Analysis and Design' approach focuses the redesign effort on those processes that will yield the greatest value to the organization, while ensuring that other areas are developed in priority order. Better collaboration—not unlike the Lean tenets of moving process steps to your customers and partners—are supported in new ways of working, optimized processes, automation, and self-service. Experience suggests that the optimal way to embed the technology, prove the business case, and realize ROI are realized via strong change management—because culture is the biggest barrier to adoption.

The key to dealing with barriers is effective communication and promotion within the business. A strong change approach creates a climate that is ripe for adoption, in which the benefits of the technology are apparent and its path for development clear.

The Power of Communication

Whether or not UCC is the answer for an organization, the failure to clarify its position on collaboration can be critical. Communication failures limit speed of response in comparison to competitors and costs mount from the additional support of a patchwork of non-unified systems. The fast-moving economic cycle, brings an ever-increasing need to work in virtual teams across borders, as well as to maximise global opportunities, and maintain the close contact demanded by clients, customers and partners.

CIOs and business executives are being asked tough questions. Can you recognise lower costs through converged networks? Can you differentiate your products / services with the new functionality offered by unified communications? How can you harness the value of social networks internally and outside the boundaries of your current organization? How can these emerging social tools, as well as other consumer products, add value to the enterprise? Can exploring innovation in your collaboration agenda help meet corporate strategic goals?

All organizations collaborate. The modern global organization is required to be a fast-moving, dynamic, responsive, immediate, virtual, and mobile entity: the effectiveness of its resource ecosystem (employees, partners, customers), as Conway explained, will be determined by the communications structures of the organization. The key question for C-level executives remains: does your communication structure enable or constrain effectiveness?

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