

# Unified Communications: Why and How

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Accenture outlines why a strategy to implement unified communications can help organizations achieve high performance—and how to go about it.

Historically, information technology was seen as an end in itself. Companies spent large sums of money to upgrade to new technologies that offered new features—and then tried to determine the business benefits they were achieving. This "build-it-and-they-will-come" mentality no longer works in the current highly competitive, global business environment. Today information technologists need to be business enablers, helping their companies reduce cost, mitigate risk and stimulate revenue generation by streamlining business processes. In short, each technology innovation must be geared to help the company achieve high performance.

Increasingly, organizations are interacting with geographically distributed teams, partners and suppliers to execute their business processes. In response, the number of ways to communicate has grown rapidly over the past decades: pager, fax, e-mail, Web conferencing, video conferencing, mobile phones, short message service (SMS), instant messaging and, of course, conventional telephones and teleconferencing.

But despite the many ways to communicate, we are still finding that collaboration is difficult. A strategy to implement unified communications, enabled by significantly enhanced technology solutions, solves many of the challenges of enterprise communications. This strategy helps private-sector organizations to improve competitiveness, and public-sector organizations to serve citizens more effectively. The contrast with traditional

information technology solutions, which only focused on technology features and IT-based cost reductions, could hardly be greater.

### Unified communications defined

Unified communications accelerates collaboration-intensive business processes and enables collaboration in context between team members, partners and suppliers to occur seamlessly, virtually and instantly. This ability to streamline business processes produces cost savings through greater efficiency, and revenue growth through incremental sales. The same technologies used for unified communications also mitigate risk by improving security, creating unified logging across all channels (for compliance), and creating a connectionless environment that is more resilient to component faults.

Unified communications is not a product that can be purchased off the shelf. It is the bringing together of technologies and processes to enable organizations with capabilities and speed that they did not previously have. This is accomplished through the seamless merging of the following technologies:

- **Converged network infrastructures:** Consolidated, Internet protocol (IP)-based, quality-of-service enabled, wired and wireless networks to transport voice, data and video communications.
- **End-user network devices:** The large and rapidly growing number of devices used for communicating over various networks.
- **Communication technologies:** The multiple protocols over which employees want and need to be contacted.

Business Process Refinement  
Application Integration  
Presence & Location Services  
Collaboration Technologies  
Communication Technologies  
End-User Network Devices  
Converged Infrastructure

## Unified Communications

Business value created:

- Cost reduction
- Revenue enablement
- Risk mitigation

- **Collaboration technologies:**

The tools to allow organizations not only to communicate, but to solve problems, regardless of time and distance.

- **Presence and location services:**

The capabilities to publish contact preferences and availability as well as search based on skill and availability.

- **Application integration:** The communications interface is not restricted to clients on specific end-user devices, but can also be embedded in business applications via a service-oriented architecture, so communications can be launched from within any enabled application in which the user is working.

Unified communications is the combination of these technology components in a way that enhances collaboration dramatically and thus accelerates the efficiency of business processes.

Unified communications overcomes the challenge of how to contact others quickly via the right channel at a given point in time; it also establishes a common log of those communications across channels. In the past, one had to try several channels to establish communications with another party: first the office phone, then the cell phone, then voice mail and finally e-mail. This trial-and-error approach often created significant lag time and hindered business processes significantly.

By enabling users to be contacted in whatever way they prefer at any particular time, unified communications solves this problem. As each user device logs onto the network it will show its understanding of the user's status; when combined with calendar and hierarchical user-preference information, this functionality creates the foundation of what is called "presence." Presence allows users to understand how best to contact each other at any given time.

Once the correct person is reached, it is often necessary to switch communication channels. Traditionally, this is done by manually exchanging contact information for the next communication channel. For example, how many times have you ended an instant messaging session by asking for the best phone number of the other person? Unified communications allows collaborators to seamlessly switch from one channel to another, for example from a phone conference to a Web conference to view an electronic document or to exchange ideas via a virtual whiteboard. This seamless switch makes it easier for people to accomplish tasks by working together in real time, as opposed to the cumbersome round robin exchange of documents and ideas.

As business becomes more competitive, many organizations are finding that they need access to information that resides inside employees' minds more

## Unified communications in action

The impact of unified communications on the way an organization does business obviously depends very much on the details of that business. One scenario might be:

A shipment is held up in customs. A form must be supplied in the next two hours or the shipment will be returned. Using a context-specific presence list, the sales agent, Jana, sees that there are four available resources from the shipping department available. She opens an instant messaging session with all four people.

Only two of the shipping department employees are familiar with the form. Two drop off and the other two decide to move into a conference call with Jana. Unified communications allows this switch of channels to occur seamlessly.

One of the shipping department employees, Jim, is working overseas at a client location. He has an electronic copy of the form but only knows how to complete the customs broker section. Jim has access to the Web, but not e-mail or fax.

The other resource, Josh, is working from his home office and knows how to fill out the form—but does not have a copy.

They all switch to Web conference mode so that Jim's electronic version of the form can be viewed. Again, unified communications allows this switch to be accomplished seamlessly.

Jana, Jim and Josh complete the form together. Once it is complete, Jana sends it via outbound fax servers to an employee that can take it to the customs agency, and the shipment is released.

This example shows a heroic use of a unified communications capability, but the true power of this approach is tapped when it is integrated into the standard business processes, and applications interact directly with end users. This integration takes unified communications beyond productivity, showing how it can truly enable the business to compete in new ways. Accenture has created a framework to align these technologies with our in-depth understanding of our clients' critical business processes and key enterprise applications to enable high performance.

and more quickly. This often means not just contacting the appropriate person, but finding that person, based on his/her role, knowledge, location, time zone and busy/free status. The knowledge mining of human resources is becoming more important—not only for contact centers, but also for virtual and geographically distributed organizations.

### The benefits of unified communications

The fact that unified communications technologies have lots of features and seem exciting is not enough; there has to be a clear and compelling business case with hard benefits. As yet, there have not been enough unified communications implementations to present a fully mature business case, but Accenture's experience in the field shows that there are already several clear benefits:

#### Cost reduction

As telephony is converged from a facility-based infrastructure onto the general-purpose data network, non-discretionary IT operating expenses are reduced. The more important cost reductions are non-IT related. The following capabilities allow the business to benefit by more efficient use of IT's resources.

#### Improved and streamlined business processes

The right people can always be located wherever they are—and on the most appropriate channel. Communication channels can also be switched quickly as needed. Business processes can thus be routed more effectively, speeding up delivery and response times. Many events can trigger automatic communication with relevant personnel (either person-to-person or application-to-person).

#### Improved and streamlined supply chain

Business partners, suppliers and customers can form part of the expanded communications network, each one reached in the way they prefer at any given time, removing delays in transactions.

#### Virtualization

Workers are no longer bound to the office or particular geographies, therefore reducing facilities costs, enabling virtual teams and empowering distributed delivery offshore.

#### Revenue enablement

Real-time, seamless communications enhance the customer experience by providing potential customers with services from the right individuals to help drive sales. Furthermore, by speeding business processes as described above, orders can be fulfilled more quickly, not only allowing faster revenue recognition, but also allowing sales to be made that previously were not possible.

## Risk Mitigation

In the event of disruption, the communications network is able to contact whoever is necessary to execute the business continuity plan on whatever channel which he or she is available. Furthermore, business can be conducted over alternative channels, as necessary, over a converged, connectionless (fault-resilient) network.

These benefits should be seen within a broader context. Accenture's High Performance Business research has shown that using technology to drive innovation through the organization is a characteristic strategy for achieving high performance, as is excellence in the supply chain. The adoption of a unified communications strategy plays a role in equipping companies in today's highly competitive marketplace to outperform competitors over time.

## Accenture's road map to unified communications

Early implementers of unified communications capabilities are likely to be those organizations that have several of the following:

- Business processes that are communication-intensive and time-critical.
- Mobile team members whose preferred communication channel is constantly changing.
- Aging telephony equipment that already needs to be replaced.
- Highly specialized or distributed workforces.
- A need for flexible business-continuity options.
- Users who are already using limited presence technology via freeware instant messaging applications.

Accenture advocates a phased approach to help ensure that an organization considering the adoption of a unified communications strategy does receive value.

## Phase 1: Infrastructure rationalization

Infrastructure rationalization consists of projects targeted at cost take-out and standardization. A unified communications environment relies heavily upon a common, standards-based infrastructure. Cost savings associated with rationalization should be reinvested in the unified communications program to help fund infrastructure transformation initiatives.

### Key projects:

- Business case and unified communications blueprint.
- Telecommunications expense management.
- Desktop rationalization.
- Active directory and messaging consolidation.

## Phase 2: Infrastructure transformation

Infrastructure transformation consists of those core infrastructure upgrades required to support real-time, multichannel communications capabilities.

### Key projects:

- Network transformation.
- Wireless LAN implementation.
- Multiprotocol Label Switching (MPLS) implementation.
- IP telephony implementation.
- Soft phone/client implementation.
- Video/telepresence implementation.
- Messaging transformation.
- Collaboration enablement and enhancement.
- Instant messaging/presence implementation.

## Phase 3: Application integration and business process enablement

Application integration ties all of the aforementioned desktop, messaging and network transformation components together into a seamless communications capability. We refer to this capability as "basic" unified communications. Integrating core business applications and processes into basic unified communications provides the true business value, delivering streamlined business processes and federated collaboration. This concept is referred to as "business-driven" unified communications. While basic unified communications can deliver cost reduction and risk mitigation, it is only through business-driven unified communications that we are able to actually generate incremental revenue through technology advancement.

### Key projects:

- Unified communications integration.
- Service-oriented architecture-based application integration.
- Business application integration.
- Business process automation.
- Unified communications architecture and blueprint.

Most organizations have some aspects of unified communications capabilities in place, but they lack a holistic strategy of how their different technology platforms and providers should be combined into a common unified communications architecture to enable the necessary scale and integration. Accenture has a unified communications architecture and blueprint that, based on our experience, can help both the CIO and business units map out a detailed plan to move forward with a business case-driven plan to achieve the maximum benefits from a unified communications strategy.

## Transformational success

These unified communications projects are not IT projects, nor are they purchased only by CIOs. Unlike most IT projects, where the goal is to isolate the user and the business from the disruption of the change, they require the involvement of the users and the business as a whole. Unified communications fundamentally changes how the users communicate with each other and how they conduct business. Therefore the projects must be focused on streamlining business processes and bringing value to the business; this cannot be done in a technology vacuum and cannot be done solely by information technologists.

For unified communications to be successful, an organization must do the following:

1. Define the end state in quantifiable business terms.
2. Take a holistic view, but a phased approach.
3. Define and measure the quality of service.
4. Manage the change, not just the technology.
5. Treat communication technologies as enterprise applications.
6. Select long-term technology partners, not just the cheapest short-term vendors.
7. Plan for a single integrated network.
8. Simplify standardized architectures.
9. Plan to reinvest cost savings from earlier phases to fund later phases.
10. Focus on the business and enabling critical business processes, not just technology-based productivity.

## About Accenture

Accenture is a global management consulting, technology services and outsourcing company. Committed to delivering innovation, Accenture collaborates with its clients to help them become high-performance businesses and governments. With deep industry and business process expertise, broad global resources and a proven track record, Accenture can mobilize the right people, skills and technologies to help clients improve their performance. With more than 158,000 people in 49 countries, the company generated net revenues of US\$16.65 billion for the fiscal year ended August 31, 2006. Its home page is [www.accenture.com](http://www.accenture.com).

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