

Use Cases: The Key to Unified Communications Implementation

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Unified communications (UC) is widely recognized as the Next Big Thing in communications capabilities. At UCStrategies.com we have defined unified communications as "communications integrated to optimize business processes." Why is there so much interest?

Capabilities and Use Cases

UC enables the *right kind* of communication (voice, email, IM, conference or other collaboration, etc.), using the *right device* (terminal, mobile, deskphone, etc.), with access through *one name* or other identifier. *Presence* provides information about the availability and accessibility of someone we need to contact. Increasingly, presence information will be updated automatically by other business applications. And, this information will be shared among multiple presence servers within companies and between servers in different companies. Finally, rules and policy engines tune presence data to provide appropriate accessibility information, while managing security and privacy concerns. In summary, UC facilitates timely communications between people, and timely access to information.

These capabilities support two key types of unified communications use cases. The first is helping individual users manage their communications more effectively. Users easily grasp the concept of hovering over someone's name in an e-mail, right clicking to find her availability, and instantly launching a communication.

The second use case involves integrating communications functionality into business processes to change how work gets done. Rather than focusing on individual productivity, this use case concentrates on removing communications bottlenecks to accomplish business goals more efficiently and effectively. Increasingly, communications functionality and accessibility are being built directly into business applications software to streamline workflows.

Drivers

There are several important drivers fueling the growth of unified communications – business imperatives, technology changes, and most importantly, the transformation of the communications industry.

Companies are becoming more virtual – going global, using teleworkers, and traveling less. But, staff and business partners in multiple locations mean that there is an increased need for collaboration. UC can help eliminate communications bottlenecks, reduce cycle time, and shorten the "human latency" that happens when someone is waiting for information or approval from someone else.

Technology changes have also enabled the rise of UC, by converging different communications transport methods. Email, IM, conferencing, mobile communications,

persistent chat, and others have created an explosion of ways to “be in touch”. UC provides ways to organize and harness this diverse range of functionality.

But the critical, long-term driver spurring UC growth is the transformation of the communications industry from being vertically siloed to horizontally layered. Three decades ago the computer industry went through this transformation. Layered architectures with standards and open interfaces between different components emerged. This spawned a new industry – thousands of developers and companies emerged to create innovative software applications. That led to the computer revolution that has seen processors become a critical component in virtually every aspect of modern life.

We are in the process of transforming the communications industry in a similar way. The industry is changing from being vertically siloed to horizontally layered. An ecosystem of business partners, applications developers, and systems integrators is now emerging that will create a vast array of innovative communications applications, just as the computer revolution did decades ago.

Implementing UC Applications

Opportunities for both major UC use cases – individual user productivity (“UC-U”) and transforming business processes (“UC-B”) – are usually found in most enterprises. UC-U concepts are easier to understand and easier to deploy. Once users understand presence-based communications access, many expand their usage to incorporate conferencing and collaboration functions. Starting with user productivity applications often builds acceptance and understanding among user communities.

The UC-B use cases start with the same capabilities and functionalities, but organize them around changes in business process and streamlining of business activities. Frequently, groups of employees follow a process controlled by a workflow system or an information portal. Communications bottlenecks can occur because someone in the process needs information from someone else. Using UC functionality can minimize disruptions in these situations. In some cases, communications functionality can be incorporated directly into the workflow or process or portal application software.

For example, an insurance adjustor, working on a claim, may need the assistance of an expert to evaluate a customer situation. The workflow logic knows the type of claim being analyzed. When an expert is needed, the adjustor clicks on a “help” box, and the system automatically identifies and engages the appropriate expert. In this case, the presence system isn’t seeking an individual; it’s looking for a particular skill set. This technique – looking for skills rather than specific individuals – is one difference in how UC-B and UC-U opportunities are often deployed.

In our consulting practice, we identify communications bottlenecks throughout an enterprise’s value chain. Five UC-B communications application opportunities re-appear in many environments: contact management, resource identification for problem resolution, collaboration acceleration, information for mobile workers, and job-specific communications portals (see chart on next page). Based on client experience and modeling work that we have done, the benefits from business process transformation are often ten times greater than the benefits from individual user productivity. Moreover, while the UC-U productivity benefits may be available, they are harder to quantify into a convincing business case. Our experience is that UC-B yields significantly greater benefits to business, while still enabling individuals to see productivity improvements in their own work.

<i>Application Area</i>	<i>Business Impact</i>	<i>Benefits</i>
Contact Management	Dramatic increase in "first call resolution"	Shorten sales cycles; Increase customer sat.
Seamless Information for Mobility	Deliver information when needed; without using others' time and effort	Avoid call backs; speed resolution; reduce support costs.
Resource Identification and Problem Resolution	Immediate access to "right" skill or knowledge; automatic follow-through	Eliminate delays; speed transactions; increase revenues; automate administrative tasks
Collaboration Acceleration	Speed project completion with less effort; improved information access	Eliminate delays; improve quality; cut meeting costs
Job-Specific Information and Comm'n Portals	Communications functions embedded at point of need	Improve speed and accuracy; use best communication tools for job

Chart: Five UC-Business Process Applications Fix Many Communications Hot-Spots

If the benefits are greater, why don't all enterprises seek business process transformation? Many organizations find it easy to understand the concepts behind in the benefits of individual productivity from UC-U. But transforming business processes through integrated communications requires analysis of how companies get things done, and commitment by management and staff to change processes to achieve the benefits. Process change is always more challenging, even if the benefits are greater.

Then what is the best implementation approach? Clearly it depends on the application opportunities available, the enterprise's particular skills and culture, and also on the factors prompting the UC implementation. Companies with a business transformation group, process engineering department, or business architect function, can alter the business processes to yield quick paybacks.

Other organizations, especially those without a detailed business case requirement, may find that it's effective to deploy UC functionality to many or all of the employees. Broad deployment invokes the "network effect", in which benefits increase geometrically with the number of connected users. In some cases, UC-U functionality became the key benefit at companies replacing aging TDM communications equipment with an IP solution. Frequently, this changeover provides few benefits or new functionality. But by also deploying UC, users realize an immediate productivity enhancement. While there are many UC applications that do not require IP, adding UC to an IP rollout can bring new or added benefits.

We recommend that companies implementing UC-U also put in place a program to identify business process applications. As users become comfortable with UC's capabilities, they will begin to incorporate its functionality into how they accomplish many of their business process communications functions. Companies should design a program to identify such application opportunities, publicize them, and encourage development and implementation throughout the rest of the organization.

A Dynamic Marketplace

One of the effects of transforming communications from being vertically siloed to horizontally layered is that new types of suppliers have entered the market. In the past, the legacy telephony suppliers dominated the market for “voice communications”. E-mail brought new suppliers offering mobility (e.g., RIM, Nokia, and others) and desktop applications (e.g., IBM and Microsoft). More recently, applications vendors and portal providers are building communications functionality into their products (e.g., Salesforce.com and Oracle).

As communications capabilities converge, these suppliers are expanding their offers and encroaching on what had been others’ territory. Increasingly, many different kinds of suppliers from many different market sectors will provide a full range of UC functionality, through their own development work, through partnerships, or through OEM arrangements.

Enterprises considering UC need to make a decision about which suppliers will be the focus of their deployment. If the enterprise phone number is the centre of corporate communications, the PBX supplier may provide the best result. In other cases, most staff work through their computers or their mobile devices, and those suppliers may provide the best applications. Or, if key communications are associated with application software or a web portal interface, then those applications could be primary.

Of course, all of these will occur to some degree in most organizations, and therefore the right answer may be to incorporate a variety of UC applications. However, most systems do not currently offer integrated capabilities to pass presence information to other environments. The industry is now like the email islands that existed several decades ago. Sending email between different systems initially was not possible, then gateways were developed, and finally universal standards made email ubiquitous. We are in going through a similar progression in presence interoperability. Progress on integration is being made, but in the meantime, careful planning is required to determine who needs to communicate with whom. This is an important planning step for enterprises.

Conclusions

Unified communications is clearly transforming how all companies work and operate. Most significantly, the transformation to a horizontally layered industry will bring widespread changes in both business and personal communications. An emerging ecosystem of developers, applications software, and systems integrators is now focusing attention on communications functionality. For business applications, almost all communications will be initiated with software assistance – to locate the best resource, or to select the best method of communications at the moment.

The key steps to effective UC implementation start by identifying communications use cases throughout the enterprise – how communications capabilities are used to get work done. Then, within these use cases, discover the communications bottlenecks that get in the way of those goals. From there, identify the tools needed to eliminate those bottlenecks, and the technology solutions that combine those tools into systems. Then, prioritize the opportunities and decide which solution(s) best fit the enterprise needs. Finally develop an action plan for acquisition and implementation.

We are just now starting to see the shape of this coming communications revolution. Businesses should start planning now to take full advantage of the emerging capabilities that unified communications will bring. It’s going to be a great ride.