

A Framework for Deploying Unified Communications

Using a Repeatable Process for Optimizing Your Technology

Brent Kelly & Jon Neville
Wainhouse Research

September 2008

Wainhouse Research, LLC
34 Duck Hill Terrace
Duxbury, MA 02332 USA

+1.781.934.6165
www.wainhouse.com



Study sponsored by:



White Paper

A Framework for Deploying Unified Communications: *Using a Repeatable Process for Optimizing Your Technology*

Sponsored by: Avaya, Inc.

September 2008

Executive Summary

Unified communications has been the subject of thousands of press articles, and it is constantly being promoted by vendors and analysts as the next great communications breakthrough that every company must adopt right now in order to remain competitive. However, this rush to unify communications has created a significant amount of doubt, uncertainty, and confusion among end user companies.

Wainhouse Research has a significant amount of experience with many vendor unified communications products and services offerings and with buyer and deployment situations through its own end-user forum. Avaya commissioned Wainhouse Research to interview eighteen end-user customers regarding their unified communications rollout plans, experiences, objectives, and services.

In this document we describe key findings from these interviews, one of which is that many end user companies have very little in the way of process and structure in how they deploy unified communications. However, there are examples where organizations have taken a more rigorous approach to deploying unified communications that has resulted in significant and measurable value. What is emerging from a study of these companies is a repeatable methodology that can help ensure the business impact that unified communications promises while reducing the corresponding risk.

This white paper describes a four step framework for moving unified communications from an ad hoc, deployment scenario, which has resulted in many of the companies interviewed having a siloed implementation, to a managed process, tying the technology to an organization's people, processes, and business objectives.



Solution Overview

Vendor Profile

Avaya, Inc.
Basking Ridge, NJ, USA

Business

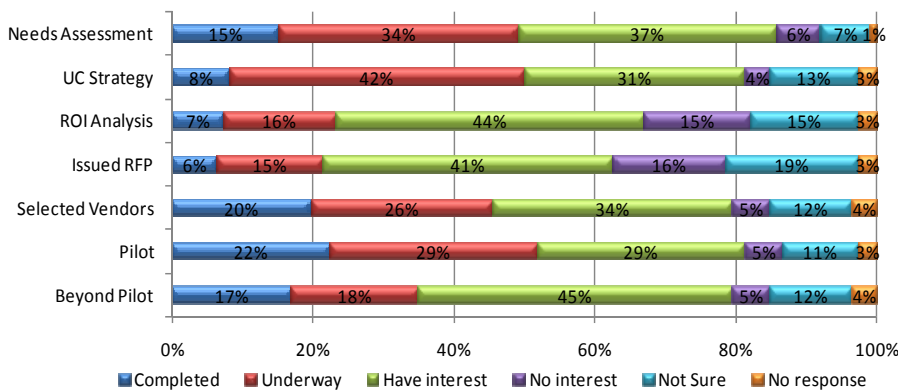
Avaya is a leading global provider of business communications software, systems and services. More than 1 million businesses worldwide, including more than 90 percent of the Fortune 500, use Avaya solutions.

UC Deployment Optimization Model

- Planning & Business Assessment
- Identify business needs
 - Profile Users and Segmentation
 - Identify metrics
 - Engaging shareholders
- Solution Design
- Evaluate existing infrastructure
 - Validate business case
 - Engineer solution
- Implement/Integrate & Optimize
- Ensure end user readiness
 - Multi-vendor integration and deployment
 - Evaluate impact and on-going solution optimization

Situation Overview

Due to the doubt, uncertainty, and confusion in the minds of end user companies, formulating a clear definition of unified communications has been difficult for the entire communications industry, and no definitive definition is in sight. Many companies are looking at unified communications, wondering if they should roll it out and how they can do so cost effectively. Our research indicates that most companies really have no plan regarding how they will roll out unified communications, and few have a well conceived strategy. Many of the companies we have interviewed and surveyed indicate that while they already have many of the components that comprise a unified communications solution, these components are usually deployed as siloed applications and in no way accessible by a unified interface.



Source: Wainhouse Research, July 2008

Figure 1: End user unified communications process responses.

In an attempt to understand if companies deploying unified communications followed any particular process, we asked them if they had performed certain steps one might expect to see when a new technology is deployed. Figure 1 shows these responses. This chart is composed of 113 respondents representing 43 very large companies (more than 10,000 employees), 37 large companies (between 1,000 and 10,000 employees), and the remainder from small to medium sized businesses.

A striking result from this figure is that few companies have performed a needs analysis, and even fewer, only 8%, have a unified communications strategy; yet, over 46% of respondent companies have either already selected vendors for unified communications or the selection process is underway. This is a stunning result! It indicates that a large percentage of companies who are deploying unified communications are doing so in an ad hoc, unstructured manner, and that unified communications is being treated more as a science project and not a business application. Not surprisingly, reports are beginning to percolate up from certain companies that have rushed to deploy unified communications solutions only to meet with poor adoption and unhappy people.

We believe there is a better way to approach deploying unified communications solutions. In this white paper, we will describe a process that will allow organizations to consider unified communications which takes into account their people, their processes, their existing technology, and their business objectives.

We believe there is a better way to approach deploying unified communications solutions... using a repeatable, yet customizable framework...

We describe a repeatable, yet customizable framework, which if followed, will enable an organization to

- 1) Remove the hype and uncertainty around unified communications,
- 2) Determine if and where unified communications can benefit the organization, and
- 3) Develop a strategy and roadmap for moving forward.

We begin by discussing key findings from a series of end user interviews performed by Wainhouse Research in May 2008 regarding unified communications rollout plans, experiences, objectives, and services. We then discuss some of the issues around rolling out technology without following a process. Next, we describe a simple framework we believe will help end users plan for and deploy unified communications solution. We conclude with a description of the services offering Avaya has developed that is used to support customers deploying unified communications following this framework.

End User Survey Key Findings

In May 2008, Wainhouse Research was commissioned by Avaya to perform a series of blind interviews with Avaya and non-Avaya customers regarding their opinions and attitudes about unified communications products and services. Companies ranged in size from large multinationals to geographically dispersed domestic companies to small businesses. Each of the 18 interviews lasted between 30 and 45 minutes. We share highlights learned from these interviews.

Piece Parts Abound, but They are not Unified

Wainhouse Research defines Unified Communications as being made up of a number of constituent parts including presence, IM, voice and voice messaging, calendaring, video, audio and web conferencing, and mobility as illustrated in figure 2. Based on our interviews, many companies have most of the constituent parts for a unified communications solution, and these components have been deployed over the last few years. However, in most cases, they are deployed in a siloed manner, with no unified interface between them. Hence, while companies say they have these or will deploy them, they are in no sense “unified”.

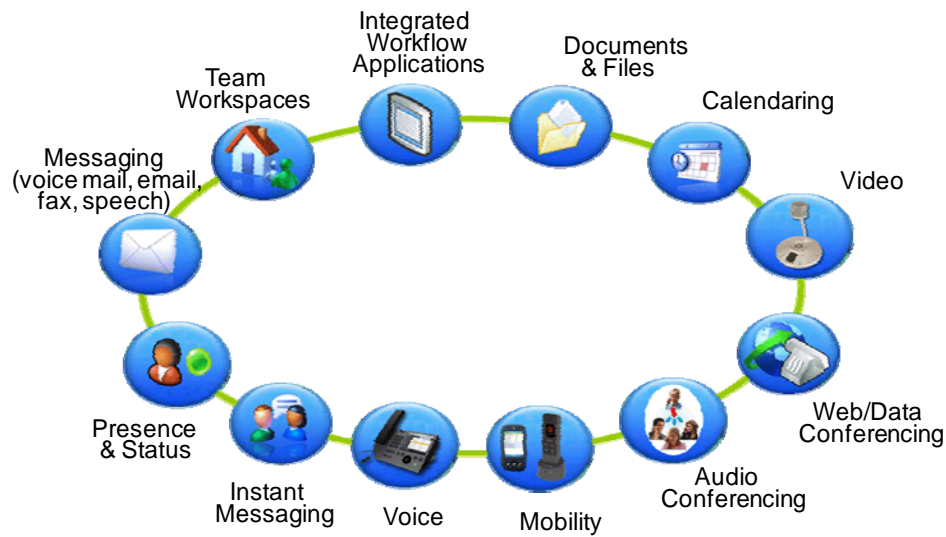


Figure 2: Unified Communications model

Skills Shortage, Services Need

IT departments are facing a skills dilemma: with the introduction and adoption of new technologies, such as IP Telephony and adjunct contact centers, IT departments do not have the necessary skill sets or a sufficient number of people to train on installation, deployment and subsequent support of these technologies. Unifying communications within an organization now encompasses several previously disparate skill sets. Deployment of UC components in an integrated manner is no longer feasible for many IT departments, and there is an increasing need for service providers that will not just do their own point solutions, but which will fully integrate their point solutions with third-party elements to make a complete solution.

User Profiling and Segmentation

The findings from the user surveys suggest that very few companies actually do any user profiling or segmentation. A few have tried, usually in an ad hoc fashion,

“The only obstacle is knowledge. Knowledge of how to do it, fear that we don’t know how to do it.” – A US Healthcare Company

but most did not express any real results from these efforts. That being said, one large multinational has done significant work in this area and plans to enable different UC components for different groups of people. This company believes that a “one size fits all approach” is not appropriate for UC, and Wainhouse Research would concur with this approach.

While most employees who have a phone and access to email would benefit from presence/IM, a unified client, and probably conferencing, not everyone will benefit from mobility or integrated video; hence, bundled UC offerings with tiered capabilities make sense in the market, provided vendor sales people can articulate their benefits.

A Defined Unified Communications Strategy

Most of the companies we interviewed have few if any concrete plans for unified communications. Most of those who said they do have a UC strategy were unconvincing in that there was little discussion about specific time tables, project plans, or anything that would indicate that rolling out UC is a planned, funded activity. Companies do not seem to understand the importance of presence in the overall scope of their unified communications deployments. Web conferencing usage was also surprisingly low among the companies interviewed.

The Unified Communications Value Proposition

Few companies interviewed really understand the value proposition behind unifying their communications capabilities. Companies believe that productivity and cost reduction are the key drivers; however they do not know how to quantify these benefits. This situation is made worse by the fact that, as previously mentioned, companies already have these siloed implementations of many of the key components needed to unify their communications. Some companies are also confused as to what unified communications actually is, citing that their IP telephony solution with unified messaging was a UC solution. Indeed one company had implemented what they considered to be unified communications, when it turned out to merely allow increased mobility within a campus environment.

ROI is not the prime driving force in UC deployment but efficiency is. Few companies know how to build a business case that will stand up in front of their CFO. Unifying a company’s communications when most of the constituent parts are already in place poses a considerable task for someone trying to justify UC from a financial point of view. Wainhouse Research has some experience in assisting companies with their ROI modeling and has shown that there are three clear types of benefits to be derived from IT projects.

- a) The first, and most important, are the ones that will make 90%+ of a business case. Without these a project is dead in the water. These “type A” benefits are real hard dollar savings that after implementation you can “hold in your hand” and go to a CFO and show the savings. These can either be in the form of capital investment cost savings or savings due to reduced maintenance or support costs.
- b) Type B benefits are those that are normally included to bolster type A benefits and where unsuspecting IT managers can easily come unstuck with their CFO. These are soft benefits, such as time savings, efficiency, and productivity, which are less tangible and harder to actually measure. Type B benefits can be used to supplement a mediocre business case.
- c) Type Cs are included when there is going to be an event in the future that will probably happen as a result of the project being successful. They are normally organizational in nature.

“[UC] just seems to make sense, so we'll do it” – A US Bank

Few companies interviewed are looking at UC for revenue generation; however, promoting UC as an efficiency tool seems to resonate with at least half of the companies interviewed. Also, there is unlikely to be a “big bang” of people suddenly “getting it” and deploying a full UC solution. It is likely that UC will be deployed in a gradual fashion as companies understand the technology and see a need either for efficiency increases or hard cost savings. Only one company looked at UC as a potential revenue generator, and that was by using UC in the call center.

Services and Service Providers

In general companies are still laying out their UC strategy and are still evaluating the options for deployment and support. They are unclear about which services they will need and subsequently pick from their service providers. Services providers need to be flexible in what they offer companies. Some companies will decide to deploy and support their environment on their own, whereas others may want an end-to-end solution for deployment and day 2 services, or even a fully managed service.

Most companies use service providers to configure their telephony switches, unified messaging equipment, and call centers because these are more complicated; however, when it comes to installing and deploying software, most IT shops believe they can still do it themselves.

All software presents an issue to a service provider unless there are some specific cost advantages or the company has downsized personnel.

Some companies say their internal IT departments need to restructure to have a successful UC deployment (e.g. UC capabilities are owned by more than one department). In many companies, the telecoms group has traditionally been responsible for telephony network related projects. Similarly there has been a networking department managing the IT function, but not connected to the telecom group; the networking group has been responsible for corporate email, and more recently instant messaging. Now, both functional areas have an interest in unified communications as they both “own” component parts of the overall unified communications concept. Clearly, these departments need to work together, and in some companies, they have restructured in order for the UC deployment to be successful.

The Key to Unified Communications

Any technology, including unified communications, must be deployed with the people and the processes it will impact in mind. An interesting 2005 study¹ about the use of technology in enterprises by Momentum Research Group indicated that if organizations deployed applications technology only, they may see a slight improvement in productivity, up to 4%. However, if organizations deploy technology taking into consideration people and processes, there is a 10 – 12 times greater improvement in productivity than with applications alone. Conversely, organizations that deploy technology without considering people and processes can actually decrease productivity and significantly increase costs.

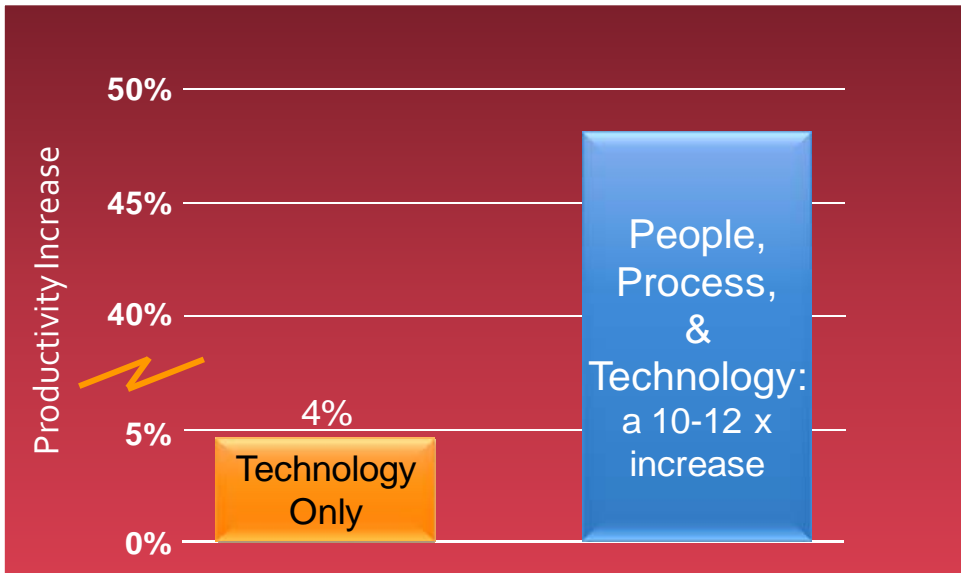


Figure 2: Productivity increase from technology deployment alone versus technology deployed with process and people in mind.

Enterprises and vendors would do well to also consider how great enterprises deploy technology. In his book, *Good to Great*², Jim Collins studied organizations that had consistently high financial returns over a period of years. He concluded that great performing companies should adopt leading edge technology only if it is intimately related to or can impact

1. What the company does best,
2. The company's economic drivers, or
3. What the company passionately cares about.

If a technology does not directly affect a company in at least one of these three key drivers, then two outcomes are advised:

1. If the technology is one that is needed (like a telephone system), then "all you need is parity" with your competitors.
2. If the technology is not required, "then," he writes, "the technology is irrelevant, and you can ignore it."

The key to unified communications is the design of communications processes, not the unified communications technology.

¹ See http://www.netimpactstudy.com/pdf/netimpact_usprs_full_report_second_edition.pdf, pages 20-21.

² Jim Collins, "Good to Great – Why Some Companies Make the Leap... and Others Don't," HarperCollins, New York, 2001.

The lesson here is that enterprises should deploy technology, such as unified communications, only if it is going to help a company's economic engine, help the company do what it does best, or assist the company in endeavors it feels passion for. To do this with a unified communications system, the solution must be designed and deployed with the company's people, processes, and business objectives in mind. Otherwise, if the technology is not required to maintain parity with competitors, it can be ignored.

Thus, the key to a successful unified communications deployment is the design of the communications processes, not a focus on the technology itself.

Elements of a UC Deployment Framework

There are a growing number of examples where customers taking a more rigorous approach to deploying unified communications have achieved significant and measurable value. What is emerging from a study of these companies is a repeatable methodology that can help ensure the business impact unified communications promises while reducing the corresponding risk.

The quality of any solution is highly influenced by the quality of the process used to acquire, develop, or maintain it. The importance of process is a long established premise in manufacturing, and it is visible worldwide in quality efforts used in a number of industries (e.g. ISO standards, Six Sigma, Software Engineering Institute's Capability Maturity Model, etc.).

Any methodology adopted needs to tie communications and collaboration technology in with an organization's underlying people, processes, and business objectives. Avaya's unified communications services organization has identified that many customers seek guidance and structure regarding how to deploy and maintain a unified communications solution. The company has consequently developed a best practices methodology for UC deployment optimization, which is resonating with many customers. The methodology and framework are described below.



Figure 3: Avaya's best practices methodology for UC deployment optimization.

Phase 1: UC Planning and Business Assessment

Planning is the most important aspect of a unified communications deployment, and the step most often overlooked. The data obtained by the Wainhouse Research interviews shows that few companies have developed a unified communications plan. While some companies do plan for unified communications, the planning, in general, has not been all encompassing, nor has it been rigorous. All successful unified communications deployments have had some level of preplanning.

Several key best practices have emerged that are crucial to this planning stage:

1. End user profiling and segmentation. As not all employees in an enterprise have equivalent communications and collaboration requirements, profiling users in preparation for deploying unified communications is important for an efficient and effective UC deployment. Most enterprises will probably have less than five categories of users ranging from those with simple UC requirements to others needing most of the capabilities a complete UC deployment can offer. The key is to look for bottlenecks or “hot spots” in the communications processes of each kind of worker. The result will be an overlay matrix of UC functional groups. From this matrix, a company can easily identify the profile of each employee and the UC functions they need to provide that employee group. The company is also able to identify which employee types will generate easy UC wins as well as where it will potentially require the greatest financial outlay on hardware or licenses.
2. Engage end user stakeholders early in the process. End users are an integral part of the planning process. The earlier they can be brought into the planning process, the better. It is surprising how rarely end users are included in planning the solution. A real incident illustrating this situation is helpful. An administrative assistant in a particular competitor’s IP telephony deployment was not brought in to the planning process. New phones were rolled out that did not have the features the administrative assistant relied on. Consequently, both the administrative assistant and her bosses found the new system unusable.
3. Identifying measures of success and quantifying value is critical. Many times, value quantification is not fully considered. Furthermore, success measures that do not tie into quantifying the business value will result in soft and intangible impact. The strength of the business case is grounded in strong ROI that can link back to key areas for improvement and competitive differentiation.

The end result of phase one is a business case identifying who can benefit, how the company will benefit financially, and what the measures of success will be for any subsequently deployed UC solution.

Phase 2: UC Solution Design

When designing a unified communication solution, the complete solution must be considered, not just a particular subsystem or partial solution. Important considerations in this step include

1. The design must be done with end user adoption in mind. If the solution is not adopted, it is not useful. Adoption will be low if the solution is a) not solving a problem or having a business impact, b) no one knows about it, and/or c) people are not trained how to use it.
2. Difficult interfaces or complex processes will limit the value of the deployment.
3. A complete design includes considering an organization’s processes and policies as well as technology and architecture.

The business impact is rooted in the planning process.

Planning is not a technology process, it is a business process.

“That was the best UC meeting we’ve ever had!” – State Government CIO’s Office

4. Designers must match the business requirements to the right technologies. It is important to keep in mind that business processes may span multiple technology platforms (e.g. desktop, phone, and mobile phone) as well as multiple vendors (e.g. Avaya, Microsoft, RIM, and IBM). Consequently, multi-vendor integration is a critical requirement.
5. A view must be kept on the future business needs and incorporated into a technology roadmap architecture

This result of phase two is an optimized solution design and an architectural roadmap plan

Phase 3: UC Implementation/Integration and Optimization

Begin with bite-sized chunks of unified communications capabilities rather than the big bang approach. Important considerations include:

1. Deploy in phases starting with anchor groups and applications that are controllable and of high value. Once implemented in these groups, expand, building off of those successes.
2. Determine, with end user input, what the metrics for success are and how these will be measured. Measuring success is important, even if the metrics change as the project progresses. A constant refinement of the metrics will provide valuable insight and information for future UC decisions.
3. Training and user support are vital for adoption. These functions should be part of the early planning, and they should be ready for the first phases of a deployment. Meeting technology deployment timelines at the expense of user training is a precursor to problems.
4. The UC solution needs to be marketed internally within the organization to both users and managers. A marketing component should be part of the original plan.
5. Multi-vendor integration will likely be necessary. With the widely divergent skill set required for a full unified communications deployment, the organization may not have all of the required skills in-house. If not, plan on using a qualified service provider. In addition, some integration may require development of custom software. These issues can be identified in the design stage.
6. Once a solution is deployed, it is important to use the measures and processes from phase one to evaluate the solution's impact. These measures should feed into an optimization process that evaluates the solution and improves it.
7. Organizations must be prepared to support and maintain the complete solution, using in-house resource or a managed services provider.

Phase three will ensure a planned rollout and evaluate full deployment success while promoting continual optimization and solution maintenance.

**I want to save money.
– Multinational Bank**

**For me, it's about
collaboration for
distributed teams. –
Multinational Food
Manufacturer**

**I want customer
intimacy. – Another
Multinational Bank**

**If you rollout the
technology, you are
going to get zero if
nobody uses it. –
Major Airline**

How Avaya Services Fits In

Avaya's approach to unified communications provides products, services, and a UC deployment optimization methodology that is resonating with end user companies. The company has always had a highly respected product line as evidenced by numerous independent reports giving the company high marks, including those from telephony industry experts like TEQConsult Group³ and Miercom⁴.

Globally, and particularly in North America, Avaya is a credible UC provider with a long history of communications successes and a good reputation for quality. Its services organization is also very strong in North America. The company has been beefing up its partner network (1,700 in North America and 600 in Europe) as well as its DevConnect Developer Network, which now has over 1,500 partner companies.

Organizations deploying a unified communications solution often need a services partner to provide guidance or expertise that the enterprise does not have in-house. Clearly there are elements of the framework, outlined above, that the organization deploying UC needs to do internally, but there are framework elements that a services organization, like Avaya Global Services, can assist with which provides great value. Avaya Global Services offers a full range of services to lead or supplement a UC deployment, including planning, design, multi-vendor integration, training and on-going support.

Whether an organization uses a services company or does the UC deployment all on its own, the Avaya Best Practices Methodology for UC Deployment Optimization will provide a helpful framework for integrating unified communications technology with the company's people, processes, and business objectives. Clearly, an important element in the planning process will be determining what the organization wishes to do using its own internal resources and what it will use a trusted services partner to do.

³ See TEQConsult's article titled, "VoiceCon's Annual IP Telephony System RFP Workshop,"

at <http://www.nojitter.com/showArticle.jhtml?articleID=207801087&pgno=3&queryText=>.

⁴ Mier, Edwin, et. al., "High-End IP-PBXs: VoIP Powerhouses", Business Communications Review, January 2006, P. 30.

Conclusion

Our research shows that many organizations are confused about unified communications and how it could or should impact them. Few have a well conceived strategy. Many companies have a lot of the elements that comprise a unified communications solution, but these are often deployed as siloed applications.

We have described a framework for moving unified communications from an ad hoc, “build it and they will come” deployment scenario to a best practices deployment methodology using a three phased approach that resonates with many customers:

1. Planning and Business Assessment,
2. Solution Design,
3. Implementation/Integration and Optimization.

These framework elements and methodology have been used by a number of Avaya customers to plan and deploy their unified communications solutions. Organizations can rely on this framework to provide a repeatable and customizable unified communications deployment methodology. Some parts of the framework must be implemented by in-house personnel, while significant portions can be done with assistance from a trusted services partner.

About Avaya, Inc.

Avaya delivers Intelligent Communications solutions that help companies transform their businesses to achieve marketplace advantage. More than 1 million businesses worldwide, including more than 90 percent of the FORTUNE 500[®], use Avaya solutions for IP Telephony, Unified Communications, Contact Centers and Communications-Enabled Business Processes. Avaya Global Services provides comprehensive service and support for companies, small to large. For more information visit the Avaya Web site: <http://www.avaya.com>. Avaya Professional Services provides planning, design and integration services for communications solutions. The organization has over 400 consultants, averaging 12 years of experience in consulting for Contact Center and Unified Communications solutions for customers around the globe. Specialized capabilities for customers in Financial Services, Public Sector, Healthcare, Retail and Hospitality exist to help customers with the specific needs associated with their industries. With the experience of over 10,000 customer engagements, Avaya Professional Services is highly qualified to help customers achieve maximum value out of investments in communications technology.

About Wainhouse Research

Wainhouse Research (www.wainhouse.com) is an independent market research firm that focuses on critical issues in unified communications and collaborative technologies including IM, presence, audio conferencing, web conferencing, mobility, videoconferencing, and streaming media. The company conducts multi-client and custom research studies, consults with end users on key implementation issues, publishes white papers and market statistics, and delivers public and private seminars as well as speaker presentations at industry group meetings. Wainhouse Research publishes a free newsletter, *The Wainhouse Research Bulletin*, as well as a number of reports detailing current market trends and major vendor strategies.

About the Authors

E. Brent Kelly is a Senior Analyst and Partner at Wainhouse Research. He has authored numerous reports and articles on Unified Communications, has spoken at industry events and trade shows, and has developed seminars on implementing unified communications technologies. Mr. Kelly has a Ph.D. in engineering from Texas A&M and a B.S. in engineering from Brigham Young University. He can be reached at bkelly@wainhouse.com.

Jon Neville is a Practice Consultant at Wainhouse Research based in London. He has more than 25 years experience in the IT industry. Before joining Wainhouse Research he spent 10 years at a major multi-national company specializing in telecommunications; particularly the deployment of IP networks, IP Telephony and more recently Unified Communications. At Wainhouse Research he provides consultancy in the area of IP Telephony and Unified Communications. Jon can be contacted at jneville@wainhouse.com.