WAINHOUSE Research

WHITEPAPER

A Guide to the Unified End User

An End User Oriented Approach to UC Adoption

Bill Haskins

June 2014

Paper sponsored by:

Logitech

Contents

Introduction

The term Unified Communications (UC) has morphed, grown, shrunk, and changed over the last 10 years. Although the term is now applied by a growing number of marketing teams to an even greater range of solutions and products, there remains a baseline UC definition: the delivery of IM, presence, voice, video, and web conferencing via a consolidated client – nice, clean, and simple.

A well-implemented and full-featured UC platform can yield benefits for the enterprise and end user alike. From the business's perspective, UC provides the opportunity to save money, increase productivity, and even transform the way it does business. From the user's perspective, UC can enable higher quality individual and group collaboration.

Unfortunately, in reality most enterprises have yet to implement a full-featured UC platform. In fact, only 23% of IT Decision makers today report that they have deployed a complete UC feature set to the majority of their users. Why is this? First and foremost, while many IT Decision Makers receive the directive to "deploy Unified Communications", they quickly find that their organization really doesn't understand what UC entails, enables, and ultimately what it can deliver. As a result, the deployment of advanced features often stalls 'post-trial', as IT teams struggle to determine which users should receive what features first, who needs what equipment, and which teams will benefit most from the UC experience.

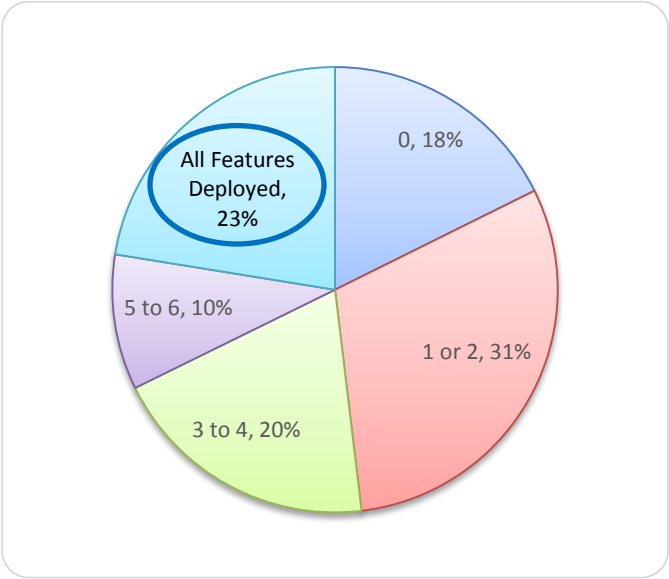

Figure 1 – Number of UC features deployed to more than half of enterprise users

The IT decision maker who has been working hard at "deploying UC" generally has a well-developed understanding of the required infrastructure – from servers, to networks, to conference rooms. However, the question remains: what is standing in the way of full adoption? The response often identifies a combination of cost, support, and network barriers as the primary roadblocks.

The fastest path to a cost effective and full-featured UC environment may be found by focusing more on your end user's behavior and work habits than on the underlying technology. This paper focuses directly on the end user by providing a view of today's typical UC environment and end

user utilization - and offers a user-oriented management program intended to increase adoption through end-user engagement.

The findings covered in this paper have been gathered through direct consulting engagements, independent research projects, and Wainhouse Research's 2014 UC Survey targeting end users and IT decision makers with experience deploying and maintaining a UC environment. We will focus on a mid-to-large enterprise-targeted UC experience, and expect that the reader has a basic understanding of UC concepts including base level features and environmental requirements.

Today's UC-Enabled Enterprise

Figure 2 shows the ranking of the capabilities deployed to the majority (>50%) of an enterprise's users. While IM continues to be the most commonly deployed capability, the numbers fall off quickly as the capabilities get more advanced – voice, video, desktop sharing, and conferencing are deployed by well under half of the responding organizations

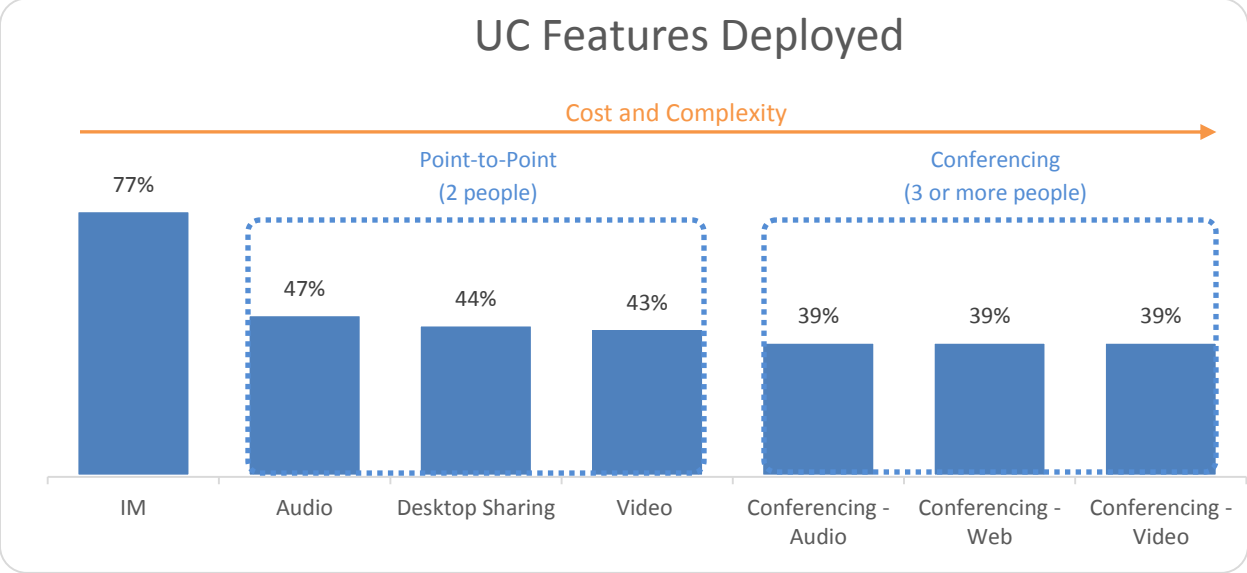

Figure 2 – UC features deployed to more than half of enterprise users

While partial deployments appear to cost less and take less effort to implement on the surface, they present false hope as the full productivity benefits and potential cost savings of a UC platform are not realized until a complete UC solution is adopted across the enterprise. Staying within a budget is the typical motivation for partial deployments as the licensing cost for more advanced features is generally higher than basic licenses – and no enterprise wants to see expensive licenses sitting unused on the sidelines. In addition, more advanced features require more complex architectures and environments – thus the costs for new network requirements, devices, voice architectures, support, and end-user training complexities all increase as the enterprise migrates to new voice, video, and conferencing services.

However, yielding to these cost challenges can be short sighted as the standard business case for justifying UC often includes reducing the costs of external telephony and conferencing services since they can be effectively replaced by these advanced capabilities. These cost reductions can only be realized by budgeting to deploy these features and, just as critical, the proper equipment, training, and support programs to drive user adoption.

The End User Solution

With an eye on the specific features and end user experience they wish to realize, every enterprise will want to define their own approach to knocking down the cost, support, and network barriers within their environment. Understanding these requirements is perhaps the most important variable to successful UC deployment and full adoption.

End User UC Behavior Snapshot

While no two enterprises are the same, a good place to start this discussion is with a view of the average user's behavior. Many IT teams take an analytical approach to monitoring feature utilization based on raw volume metrics – how many IM's did we generate last week, how many audio conferences were held, etc. This approach may help with network sizing requirements, but it may not provide a true view of the features your end users want, prefer, or rely on. Analyzing features used daily vs. occasionally, however, can provide a better picture into UC feature demand. Figure 4 shows the results of our survey question "which UC features do you use daily vs. occasionally".

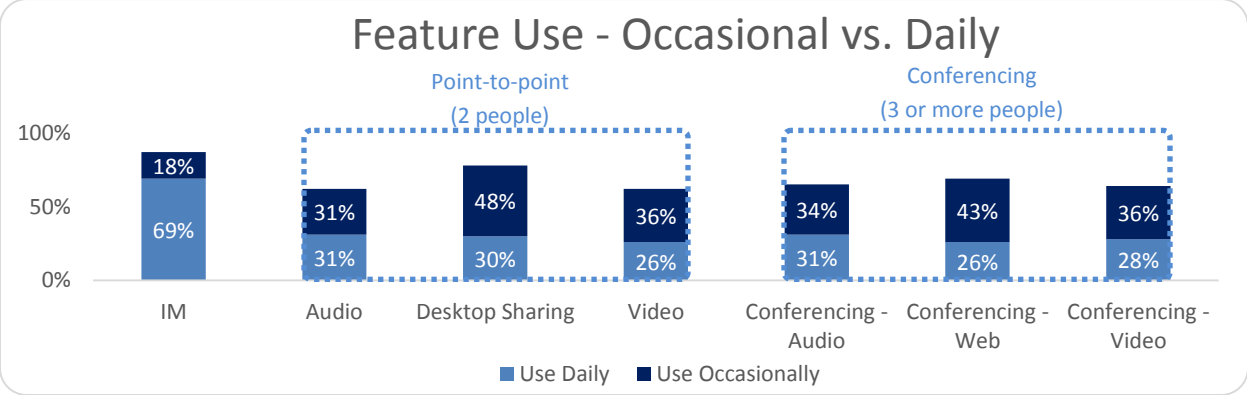

Figure 3 – Features Used Daily vs. Occasionally

The data reveals that IM, the most commonly deployed UC feature, is also the feature most commonly used on a daily basis. Note that if 'Daily Use' was used exclusively as the metric for judging a feature's importance, desktop sharing could be easily discounted as a critical feature. However, when 'Occasional Use' is added, it is easy to see that desktop sharing is nearly as popular as IM – both are being used at least occasionally near 80% of the time.

Another important message delivered by this chart: a wide disparity exists between those features used on a daily basis compared to those used on an occasional basis. The fact that desktop sharing and video are less likely to be used on a daily basis does not imply a lack of demand or importance – both features may be deemed mission critical even though they aren't used daily. For example, while many IT teams may be concerned that personal video conferencing will be a high-bandwidth LAN-killer, many find that, once deployed, video is used less frequently than anticipated. However, on the occasions that video is used, it adds a material benefit to a weekly team meeting, project meeting, or other regular group interactions.

Another approach to analyzing user behavior is to take a look at which features are most commonly used together. Figure 4 presents our view based on observed usage – and paints a very interesting picture.

Most Common Combination of Features Used

Order of Use

Number of features used

	First	Second	Third	Fourth	Fifth	Sixth	Seventh
7 features	All features used at least occasionally						
6 features	Desktop Share	Web Conf	Audio Conf	Video Conf	Personal Video	IM	
5 features	IM	Personal Audio	Desktop Share	Web Conf	Audio Conf		
4 features	IM	Desktop Share	Audio Conf	Personal Audio / Video			
3 features	IM	Desktop Share	Web Conf				
2 features	IM	Desktop Share					
1 feature	IM						

Figure 4 – UC Feature Combinations

This table reveals that IM and desktop sharing are the two most commonly used features when a user leverages just a few UC features. However, as users move up the scale and report the use of 5 or 6 features, they begin to use the conferencing features more often. For example, those reporting the use of six features show desktop sharing and audio / video / web conferencing as the most commonly used features – with IM taking sixth place! Conclusion: as end users become more comfortable with the full feature set of today's UC platforms, conferencing rises to be a core benefit.

Another key point reinforced by this data is a fundamental shift in behavior within today's knowledge-work-driven enterprise: the demand for text, content, and group collaboration is increasing in relation

to the demand for two-party voice or video collaboration. This observation is reinforced during various end-user consultation engagements as well, as many report group collaboration, in the form of an audio or video conference call, has become a major part of their daily communication.

End User Role Management

While it is important to understand the average end-user behavior, it is equally important to establish that not every user, nor every function, will require the same communication tools, devices, and overall experience. Establishing end user roles is an emerging best practice intended to help you deploy the right solution to the right end user - cost effectively and efficiently. The following four steps are key to understanding, segmenting, and providing UC services across a diverse user population:

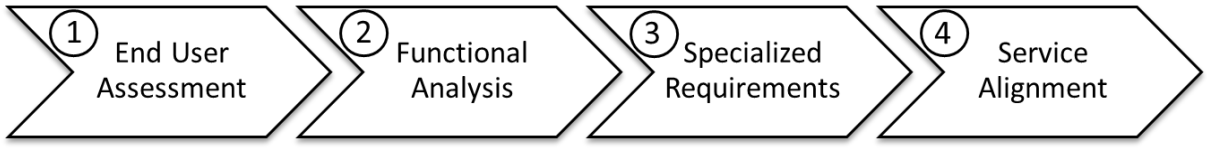

Figure 5 – UC Role Segmentation Process

End User Assessment: The fundamental goal of the assessment is to document the core communications requirements for your enterprise - to understand what is working, what isn't, and what is missing. While gathering feedback during this phase, it is important to catalog each end user by role and function for the subsequent functional analysis. For example, many enterprises find that younger knowledge workers have a preference for mobile devices and video-enabled communications. While a survey-based view of end-user behavior provides a view of the average end user's UC behavior, a detailed assessment should be conducted to determine what features your end users need today, as well as the tools they will need tomorrow. Consider the following best practices when assessing your user's UC requirements, and leverage those that make the most sense for your organization:

Functional Interviews	Blanket Surveys	"Suggestion Box"	"Ride Alongs"
Select key team members by function and level, and ask simple questions – what tools are used most frequently? What delights you? What doesn't? Consider a combination of individual and team interviews.	A survey delivered to the entire user population will better quantify end user requirements. Surveys also give a voice to every user, and can be repeated on a regular basis.	Some users are just more comfortable with submitting feedback anonymously.	Asking your end-users for feedback is good. Direct observation is better. Select key users and observe the tools they use and how they communicate – then repeat across the core functions within your organization.

Figure 6 – Functional Analysis

Functional Analysis: A thorough assessment will provide the foundation to your end-user roles. While the actual roles will vary by organization, common roles include:

- **Administrative Assistant** – any employee responsible for managing another's communications will require specialized services and equipment.
- **Cubicle Employee** – at a minimum, cubicle employees need a solution to help communicate without disrupting others. For those enterprises embracing open seating / "hot-desking", laptops, soft clients, and personal headsets are a must.
- **Manager** – team leaders need collaboration tools to pull their teams together, and may benefit from devices that incorporate a speakerphone and/or wide-angle video cameras to allow for ad-hoc group discussions.
- **Executive** – think simple and shiny – anything to keep your most expensive assets productive without confusing them.
- **Road Warrior** – mobile, mobile, mobile – but without the cost. Today's UC platforms deliver fully functional IP audio and video collaboration, allowing your road warriors to displace expensive cell minutes with IP voice and video traffic.

Identify Specialized Requirements: Depending on your organization's size and complexity, assigning specialized roles may be appropriate, such as:

- **Specialized collaborators** – i.e. training teams and project managers who require advanced features – web conferencing, streaming, polling features, etc.
- **Secure collaborators** – i.e. legal and financial teams with regulatory requirements including archiving, disclaimers, etc.
- **Technical collaborators** – i.e. IT and operations teams who must be available 24x7 and able to hop on a troubleshooting call at a moment's notice
- **Mobile collaborators** – i.e. sales and executive team members who are more likely to call into the conference from a hotel room or airport then their office

A key point to remember during this step: not one size will fit all. Accounting for the "niche users" who require non-standard solutions is as important as providing a standard UC solution. This is especially critical for those functions that regularly interact with people outside of the enterprise – contact center employees, HR, procurement, and sales teams. The IT teams who attempt a one-size-fits-all strategy will invariably find rogue solutions popping up as end users attempt to solve their own communications needs - often by using unsanctioned, consumer-oriented solutions. Take the time to document your organization's niche requirements up front, and put a plan in place to deliver and support those unique needs.

Service Alignment: Now that you understand your end user requirements segmented by role, it is time to align them with your UC service offering. There are two important sub categories to this step – assigning features and providing UC-compatible devices:

Feature Alignment: It is rarely cost effective, efficient, or even required to deploy every UC feature to every user within an organization. A primary goal of the end user role analysis is to align your users with

the features they actually need. First and foremost, you must align your features with the licensing structure specific to your UC platform. For example, your feature list may include:

- Instant Messaging and Presence
- VoIP – enabling IP audio calls or conferencing between users
- Video – enabling IP video conferencing between users
- Data sharing – including application or desktop sharing
- Telephony – enabling the ability to place and receive calls to and from the PSTN
- Conferencing – providing the ability to *host* an audio, video, and/or web conference with three or more users

The next step is to align your users with the UC features that their role requires. For example:

Role	IM/P	VoIP	Video	Desktop	Telephony	Conferencing
Administrative Assistant	✓	✓			✓	
Cubicle Employee	✓	✓	✓	✓		
Manager	✓	✓	✓	✓	✓	✓
Executive	✓	✓	✓	✓	✓	✓
Training	✓	✓	✓	✓		✓
Mobile Collaborator	✓	✓			✓	

Figure 7 – Sample Role/Feature Assessment

This exercise provides an important opportunity revisit what are often outdated assumptions of the tools and services your users actually require to be effective within your organization. Ask yourself – does everyone in my company actually require a phone number to do their job? If a project manager has a cell phone for business use, do they need another extension and path to the PSTN? Does your administrative assistant team still require their own conferencing host codes, or does your new UC platform provide them more flexibility in scheduling and managing an executive's conferences? Do your road warriors really need video, or do they regularly default to audio due to bandwidth limitations?

Device Alignment: The devices, hardware, and environment that you provide your end users will make or break their actual UC experience. A common mistake made by well-intentioned IT teams is to discount the importance of certain elements within this category – which invariably results in additional complaints, troubleshooting, and a generally reduce collaboration experience. Consider the following components that will ultimately provide the interface between your end user and the UC platform:

- **Personal computers –** Many enterprises are replacing desktops with laptops for most employees and tablets for some. Compare the resources and compute power available in your current environment against the requirements of your UC solution. Specific areas that can cause headaches:
    - **Operating System:** The client experience can differ dramatically between OS's.

- **Hardware Level:** A number of IT teams have promoted their new UC platform's ability to deliver an HD video experience, only to find out that the average user's PC doesn't possess the required horsepower – post rollout!
- **Software Environment:** Virus checking, defragmentation software, and other common 'optimization' solutions can wreak havoc on your end user's UC experience. Take the time to evaluate how your standard software profile may affect your UC experience.

- **Mobile Devices –** The top UC software vendors have worked very hard to establish feature parity across the most popular end-user devices and now deliver a minimum of IM/Presence, audio, and video capabilities across desktops, smartphone, and tablets. A growing number of IT teams are focusing on UC mobile clients as an opportunity to reduce cell phone charges by leveraging over-the-top VoIP calling features when their users are on LTE or wifi networks. Current Android and iOS users should be able to use the current UC clients, but an assessment of your currently recommended mobile hardware is in order to ensure an optimal mobile UC experience.

- **Interface Devices –** This category covers the devices that provide the user with audio and video capabilities – desk phones, headsets, speakers, and video cameras. While there are a growing number of enterprises moving towards headset-only communications, certain users will have a hard time giving up their desk phone. While this is an easy category for an IT team to try to save money, it is generally a mistake to skimp on this category. For example, wideband audio and high quality video are two advanced capabilities of today's UC platforms. Ensuring your headsets and video cameras are capable of delivering these advanced experiences is highly recommended.

Once your standard devices have been identified, it is a simple task to create device profiles for your identified end user roles. For example:

Role	Laptop	Smartphone	Tablet	Wireless Headset	Wired Headset	Webcam
Administrative Assistant	✓	✓		✓		
Cubicle Employee	✓				✓	✓
Manager	✓	✓			✓	✓
Executive	✓	✓	✓	✓		✓
Training	✓			✓		✓
Mobile Collaborator	✓	✓	✓		✓	

Figure 8 – Sample Role/Device Assessment

End User Engagement

Deploying a new service is often the easiest roadmap task for an IT team. However, ensuring the end user adopts the solution successfully can be hit or miss. Users should be engaged at every stage of your UC rollout to ensure they adopt the solution as intended:

Awareness campaign – The most important step in promoting a new solution is to engage the business executives as partners in the communication. The most successful rollouts include a heavy dose of executive engagement – find the right executive sponsor, and ensure that cross-functional leaders are involved in early pilot stages. An end user is much more likely to start using a tool when it's the best way to communicate with their boss than when the IT team sends them an email.

Functional testing and rollout – The second key to success in end-user engagement is to involve the next layer of cross-functional leadership during a solution's beta-test phase and ultimate production rollout. As many IT directors profess, the accounting team is much more likely to transition to a newly deployed solution when their functional VP's name is on the request.

Peer training and support – One of the most important elements impacting user adoption is a successful training program. A combination of on-demand and instructor-led sessions will provide an option for every employee. Consider engaging tech-savvy end users as a potential shadow-support team – target the most interested and engaged team members, recruit them to help train, and find ways to create local support teams.

Continuous Promotion – End-user communication on a new service should not end when the training program is complete. On the contrary, research shows that users require five impressions over 30 days to successfully change their habits. Engage users frequently via newsletters, contests, and other promotional activities to help ensure the new solutions are adopted successfully.

Summary

The way work gets done has fundamentally changed. Collaboration between local and virtual team members is now a mission critical focal point for many organizations. As end-user expectations and communication preferences evolve, the tools that support and enhance their experience do as well. Unified Communications solutions represent the evolution of the voice-only PBX, providing a cost effective, full-featured, and enhanced platform for internal and external communications.

Unfortunately, for many enterprises, the path to a fully functional UC experience can quickly become complex and confusing. As a result, without proper planning, UC deployments can be long, protracted exercises that may not deliver the originally-intended user experience or target benefits. However, by increasing your focus on your end users, you can ensure you are placing proper focus on the right areas and ultimately create a comprehensive and functional communications environment. This approach should allow you to meet both enterprise and end-user requirements alike in the most cost effective and efficient manner possible.

UC also represents an opportunity to bring collaboration within your enterprise to the next level. Those organizations that have provided their users with access to advanced text, audio, video and web collaboration tools, within a familiar and consistent toolset, available on the devices they use on a daily basis, served from a cost effective platform, invariably report a dramatic increase in both the amount and effectiveness of collaboration. Take this opportunity to question your traditional approach to communications, including the features and devices that you've historically used. Focus on the adoption of the new tools, and work to leverage these tools to their fullest extent – thus creating a foundation for transformation within your enterprise.

About the Author

Bill Haskins is a Senior Analyst at Wainhouse Research with a strategic focus on unified communications products and services. Bill has over 15 years of experience supporting, delivering, and designing converged collaboration services in a global communications environment. He has authored multiple white papers and articles detailing the keys to a successful UCC implementation and delivered various UCC presentations, highlighting his experience integrating collaboration solutions into business process and enterprise applications. He can be reached at bhaskins@wainhouse.com.

About Wainhouse Research

Wainhouse Research, www.wainhouse.com, is an independent market research firm that focuses on critical issues in the Unified Communications and rich media conferencing fields, including applications like distance education and e-Learning. 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 variety of reports that cover all aspects of rich media conferencing, and the free newsletter, *The Wainhouse Research Bulletin*.