

# Implementing Unified Communications:

## 6 CRITICAL CRITERIA FOR SELECTING THE RIGHT SERVICE PROVIDER

*Recent developments and trends such as BYOD, advances in enterprise video technologies, and a proliferation of employee collaboration platforms have prompted more and more organizations to develop comprehensive unified communications (UC) strategies. Compelled by the prospect of reducing communication costs and raising employee productivity, 78% of organizations report they already have a strategic plan and budget in place for at least some components of UC<sup>1</sup>.*

*Yet, IT leaders continue to report less-than-satisfactory performance with their UC systems – some right from the point of implementation. To demonstrate the current state of UC implementation success, only 45% of IT leaders interviewed by Nemertes rated their UC implementation as “successful” or “highly successful,” while 28% indicated their implementations were unsuccessful<sup>2</sup>. These results underscore that, despite having more than a decade to refine and perfect the UC implementation process, providers and partners are often falling short of enterprise customer expectations.*

*Enterprises need a trusted service provider that partners with their organization throughout the entire UC lifecycle – from defining business requirements to solution design and deployment to ongoing enablement and day-to-day management. But how do you separate the vested partners from those who are merely technology or solution providers? This paper will outline six critical criteria that every enterprise should evaluate when choosing a UC service provider.*

### Plan for change

Before setting out to select a UC service provider, a vital intermediary step is to assess and prepare your own organization for change. Introducing and implementing new technology within an enterprise presents many challenges in today’s complex networks. It is even more challenging when that new technology is a replacement or enhancement to existing capabilities, which is often the case for UC.

When it comes to replacing your existing PBX system with a UC solution, challenges include:

- Changing users’ behavior to align with new workflows, capabilities, and standards
- Understanding and gaining visibility into current system usage
- Accommodating various technical and business requirements for all users and customers across all departments and lines of business

This last challenge is perhaps the most important to address, as driving adoption for new or enhanced UC network capabilities requires input and feedback from all departments and lines of business. Capturing this input ensures the adoption of a UC network becomes more about the users and customers and less about the technology. Ignoring this step can and will result in failed UC implementations, which are defined by less-than-desired adoption rates and falling short in terms of the expected business benefits. To optimize the value of a UC network, you need to plan for change in terms of existing use cases and business processes which, in some instances, will require specialized training and support for end users.

### Understand the interplay between your business and current system

A critical step in preparing for a UC network deployment is understanding what your users, customers, and lines of business do, why they do it, and how they do it with the features and capabilities enabled by your current system. This comprehensive assessment will allow you to baseline current usage of critical features, assess capability gaps, and evaluate workflows that support your entire ecosystem of users.

This assessment also enables your enterprise to establish clear technical requirements to improve capabilities, network optimization, location-independent access, and integrated

1. “The Future of Unified Communications and Collaboration is Managed,” Dimension Data and Ovum, 2013

2. Irwin Lazar, “The Critical Factors for UC Success,” Nemertes Research, December 16, 2013

workflows. Finally, the assessment will help identify specific areas of your enterprise's features and capabilities, network, and support systems that will require changes as you implement and manage a UC network.

## Start with the end state in mind

Once all internal due diligence and requirements have been identified and business expectations and impacts have been clearly documented, you will be ready to select a service provider that can support the complex task of implementing a UC network. Your service provider should provide the technical, business, and operational expertise to ensure your UC implementation is successful – from the start of your project through completion. The end result is that your organization will possess the solution, knowledge, and visibility needed to successfully manage your UC network.

## The 6 critical criteria

One of the biggest challenges an enterprise faces with regard to the implementation of a UC network is finding a provider that can deliver on all the critical aspects of the project. The selection criteria outlined in this paper is based on 10 years of UC network implementation support, as well as best practices collected from working on some of the largest, most complex UC networks in the world.

### 1. Plays an active role during the requirements definition stage

Determining the right service provider starts with their ability to provide three critical elements to the requirements definition stage for any UC implementation project:

1. **Translates your current capabilities and requirements based on your assessment into a detailed design and implementation plan.** This requires a detailed comprehension of end-user usability and workflows, as well as the impacts of changes introduced with a UC network.
2. **Provides consultation and recommendations for improvements and changes.** Your service provider needs to acknowledge that your UC network is not just a PBX replacement. Their recommendations for improvements and changes should address how to deliver a superior end-user experience through new features, optimize costs and resource utilization rates, and provide a comprehensive UC network management and support framework.

3. **Discusses your business objectives and expected user adoption rates based on previous experience.** The service provider should provide guidance and recommendations that improve end-user experiences and showcase that they have the skills to conduct ongoing training to ensure post-implementation success.

Defining requirements is the most critical stage of a UC network implementation. If not properly managed, requirements will instead be defined in the implementation stages, which can result in cost overages, project delays, and end-user dissatisfaction.

### 2. Leverages a UC deployment rate model to help accelerate projects and reduce costs

Many service providers start to differentiate themselves based on their approach and level of support they provide during the deployment stage of your project. Traditional deployment models are based on the number of sites within your company, where service providers dispatch a resource to each remote site to complete the implementation.

This use of on-site resources generates incremental travel and operational expenses, thus increasing your overall project costs. Further complicating matters is the inefficiency that stems from dispatching dedicated personnel to dedicated sites, which can delay project timelines. And because these on-site resources don't often follow standardized processes, the number of endpoints that are implemented across phases can fluctuate significantly.

Service providers that have adopted a centralized deployment rate model for managing UC implementations provide greater flexibility. Site deployment rates can easily scale up and down as needs dictate, and because resources are centrally managed, there is more predictability and control with regard to each implementation phase.

This centralized model requires data collection for all critical configurations and settings within a UC system and supports the deployment of endpoints as a percentage based on total project endpoints.

Most enterprise locations can be divided into three categories:

1. Campuses have a larger number of users located on one or more floors or building and are connected over a LAN. Typical endpoint counts range between 500 for small campuses and 30,000 for a large campus. There are typically one to 10 campuses within an enterprise.

2. Remote offices are regional sales and support offices with a small to medium number of users located in a single building connected over a WAN. Typical endpoint counts range from 50 for small remote offices to 500 for large remote offices. There are typically 50 to 1,000 remote offices within an enterprise.
3. Retail offices have a small number of customer-facing users located in a single office that are connected over a WAN. Typical endpoint counts range from five for small retail sites to 25 for large retail sites. There are typically 500 to 5,000+ retail offices within an enterprise.

The centralized model can support deployments of 500 to 2,000 endpoints per deployment phase, but the optimal deployment model is 1,000 endpoints per deployment phase. Based on the size of an enterprises network, the deployment rate can vary. The optimal best practice deployment rate for specific UC network sizes are as follows:

1. 5,000 to 20,000 endpoints: 5.0 to 20.0% deployment rate; 5 to 20 deployment phases
2. 20,000 to 50,000 endpoints: 2.0 to 5.0% deployment rate; 20 to 50 deployment phases
3. 50,000 to 100,000 endpoints: Less than a 2.0% deployment rate; 50 to 100 deployment phases

The benefits that can be realized with the deployment rate approach include:

- Better control over costs and project timelines.
- Optimal resource/personnel utilization, as each deployment phase supports the maximum number of endpoints that can successfully be deployed.
- Reduction in the number of deployment phases required to complete the UC network implementation. For example: a 1.0% deployment rate means the project will require 100 deployment phases. If you increase the deployment rate to 1.5%, it will only require 67 deployment phases.
- Improved visibility into the progress and status of the UC network implementation for all technical, business, and management personnel, which accelerates the completion of the project.

### 3. Can deliver 100% verification rates to mitigate user-impacting issues

Many service providers still depend on standardized, manual testing to determine operational readiness at a site. This approach is performed during the final stages of a deployment phase, which includes device deployment and site cutover. The problem with this traditional approach is that issues are identified too late in the deployment process, and typically, only issues related to the site cutover are resolved. In many cases, service providers only test a 5 to 10% sampling of the deployed features and users, which causes end-user or customer-reported issues after implementation that disrupt productivity and your business.

Service providers that have adopted a centralized deployment management approach have adapted a verification rate model that supports all stages of the UC network deployment process. The model requires collecting data for all critical configurations and settings, as well as remote device control to support the execution of all required system, site, and user acceptance testing (UAT) cases. The verification rate is measured for two key areas:

1. **Implementation stage verification:** This approach provides verification for all stages of a UC implementation phase, including:
  - a. UC system post provisioning
  - b. UC device deployment
  - c. UC site cutover
  - d. UC implementation final acceptance
  - e. Post-UC implementation business performance

Each stage can include a comprehensive analysis of configurations, device status, network settings, user/site/feature UAT, final implementation verification, and user performance and usage analysis for the initial business day.

2. **Comprehensive system, site, feature, and user acceptance testing:** This approach enables 100% verification of all UC implementation components and end-user specific features and capabilities.

The benefits that can be realized with this approach include:

- 100% verification rate for all implementation stages, which will identify provisioning and implementation issues, enabling problems to be identified and remediated in advance of UC site/user cutover.

- 100% system, site, and UAT verification to ensure all required resources, features, and end-user specific components are operationally ready.
- Advanced troubleshooting for reported issues to support root cause identification, which allows resolutions to be implemented prior to future UC implementation phases.
- Reducing post-implementation, user-impacting issues to mitigate business impact, increase end-user satisfaction, and accelerate adoption rates for key UC capabilities.

#### 4. Supports continuous end-user experience monitoring

Service providers that utilize a traditional UC implementation model do not have the ability to monitor the end-user experience. Previously referred to as customer or end-user satisfaction, which was focused on service performance, this has recently been expanded to include additional factors. And an important factor for determining the success of a UC implementation project is the documentation of the end-user experience.

There are three factors that define the end-user experience: feature adoption, usage, and issues. Visibility into these three factors will enable your enterprise to clearly determine the level of expected satisfaction for end users and customers. Usage and feature adoption rates will also allow your organization to identify additional end-user training requirements and determine alternative endpoint device options for low-usage users.

Service providers that have the capability to monitor end-user experiences after implementations are completed enable your enterprise to clearly document technical and business benefits as your network continues to expand.

#### 5. Assures performance through a final UC implementation assessment

Medium- to large-scale enterprise UC implementations require multiple phases, which means the overall project can take months to years to complete. All UC implementation projects are completed based on a specific design standard, which ensures all sites, endpoints, and end users are configured based on precise technical and business requirements.

Upon completion of a deployment phase, the sites, endpoints, and users are transitioned to the internal or outsourced network operations team for ongoing support. This includes moves, adds, changes, and deletes (MACD), endpoint upgrades, troubleshooting and remediation, and network, system, and call performance management to ensure the expected traffic does not exceed the UC system and network capacity.

The network operations team does not always adhere to the implementation design standards that, over time, can increase the complexity of the UC network's configurations. The increase in complexity makes it more difficult to manage the UC network and any planned expansions and changes.

Gaining insight into the actual system, site, and user performance and capacity also factors into a successful UC implementation. In some cases, the actual performance and capacity of a UC network exceeds the metrics that were used to develop the implementation design. This is often a result of performance and capacity calculations being taken at the start of a project – where traffic on existing PBX systems continues to increase – or as a result of providing estimates because precise, accurate performance and capacity data is not available.

Your service provider must be able to perform a final UC assessment that establishes the final implementation baseline. This baseline will identify implementation and performance issues that need remediation, as well as changes to existing processes that need to be resolved.

#### 6. Delivers actionable recommendations for managing your UC network

Enterprises planning to implement UC within their network often neglect to conduct a review of current support and management processes, applications, and tools. The service provider you select should include an assessment of your current management capabilities and provide guidance for modifying change management processes. This includes providing recommendations for the applications and tools that will best support these required changes, ultimately enabling you to better manage your UC network.

## About Riverbed Professional Services

Companies worldwide rely on Riverbed Professional Services (RPS) to optimize the entire unified communications (UC) lifecycle – from deployments and migrations to ongoing operations. Among its portfolio of consulting solutions for UC networks is the Unified Communications Deployment Verification Service, which enables enterprise customers to build a fully integrated execution and communication plan to keep UC projects on track, on budget, and trouble free.

Leveraging Riverbed® SteelCentral™ UCExpert, a best-in-class UC management application from Riverbed, RPS consultants work with enterprise customers and UC solution providers during new deployments or expansions to verify functionality, troubleshoot anomalies, and ensure key performance objectives for availability, quality, security, and capacity are achieved.

Learn more about the Unified Communications Deployment Verification Service and other UC-related service offerings by visiting <http://www.riverbed.com/services-training/Services-Unified-Communications.html>.

## About the author

Kevin McGowan is a Principal Consultant for Riverbed Professional Services. He has more than 35 years of experience in IT solution implementations, including a rich background in unified communications. During his career, he has been directly responsible for the implementation verification of more than two million UC endpoints; has served as a lead consulting resource on UC-related projects for several Fortune 500 companies; and has worked closely with leading UC providers such as Cisco and Avaya.

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## About Riverbed

Riverbed is the leader in Application Performance Infrastructure, delivering the most complete platform for Location-Independent Computing. Location-Independent Computing turns location and distance into a competitive advantage by allowing IT to have the flexibility to host applications and data in the most optimal locations while ensuring applications perform as expected, data is always available when needed, and performance issues are detected and fixed before end users notice. Riverbed's 24,000+ customers include 97% of the Fortune 100 and 95% of Forbes Global 100. To learn more, visit [www.riverbed.com](http://www.riverbed.com).