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You Know You Need to Monitor Your UCC Network: But What Isn't the Data Telling You?

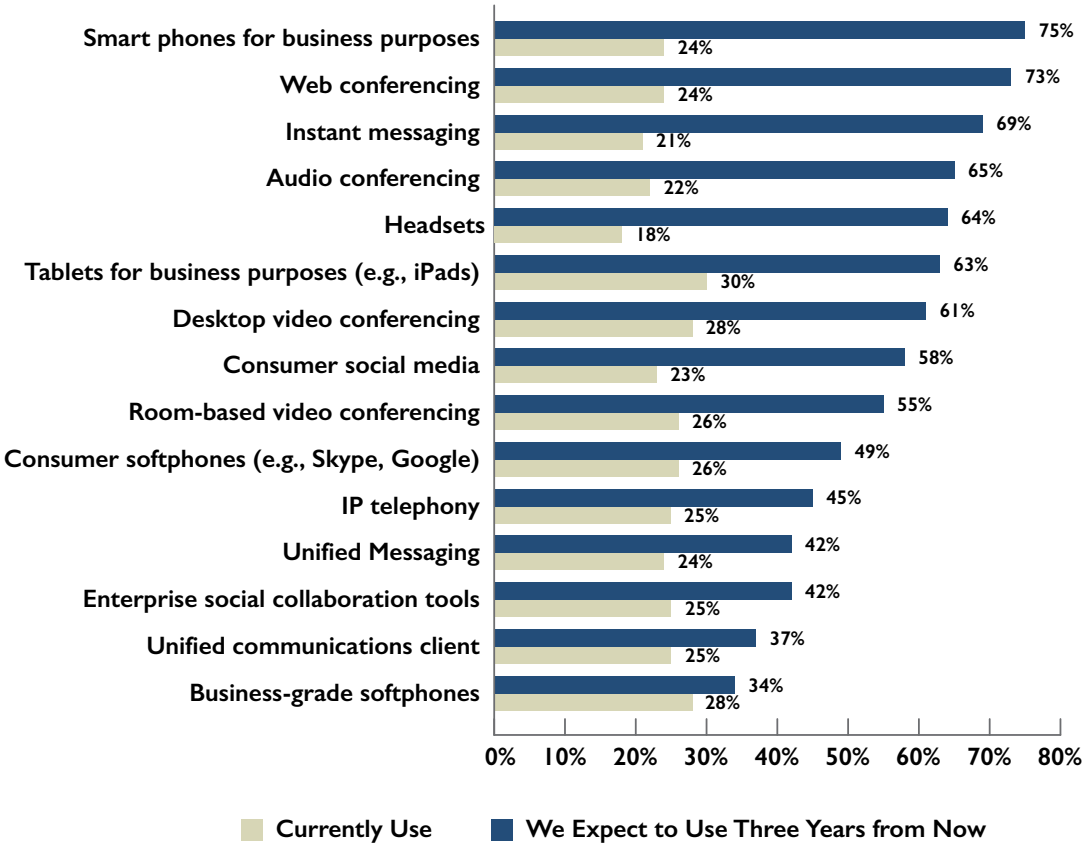
Deploying a full suite of management solutions provides opportunities to deliver complete reports and real-time feedback

A Frost & Sullivan White Paper

With unified communications and collaboration (UCC) transforming the way employees share ideas and information, most IT executives understand the need optimize user experience to realize the full benefits of a UCC deployment. To ensure an optimal user experience, IT needs to manage and monitor the applications, servers, endpoints, and network infrastructure that drive the way today's work gets done. But they may not be getting all the information they need to make accurate, actionable decisions that will improve performance and deliver the productivity gains promised by these new technologies—gains that are required for success in today's increasingly mobile and distributed workplace.

A recent Frost & Sullivan research survey of more than 400 IT decision makers in the United States reveals that more than half of employees work remotely. To help support this virtual workforce, a significant majority of employees are using a wide selection of UCC tools on a daily basis. In most cases, those that are not yet doing so will be within the next three years.

Current and Future Usage of UCC Tools



Source: Frost & Sullivan

Given this rapidly changing landscape, IT managers face a slew of new operational challenges: increased complexity and interoperability, the need for 24/7 access, and a vast array of technologies that drive and support newly converged networks.

To conquer these challenges, many companies rely on management applications to monitor call quality and to attempt to investigate and remediate user experience issues. But while everyone talks about the user experience, they often misunderstand where the data they are relying on comes from. Often, it is not as relevant or actionable as it could be. Most monitoring tools rely on the statistics provided by the manufacturer of the underlying UC platform, but these platforms only report on the components of call quality they can see.

Take the popular Skype for Business: managers who use only Microsoft's built-in monitoring for quality and performance might think they're getting a complete and accurate picture of what's happening at the end-user level. In reality, however, the end-of-call statistics that Microsoft provides will only show the weighted average of the call quality. Complicating matters even more, not all clients or endpoints report quality statistics back to the Skype for Business monitoring server, leaving the organization blind. If Skype for Business doesn't know and the monitoring tool doesn't have a separate component analyzing packets, how does the monitoring tool communicate what happened?

To close these data gaps and deliver an exceptional user experience—every time, for every user—smart companies are deploying rich, third-party tools that collect and correlate the relevant information at the network level in real time. These tools are explicitly designed to improve management, visibility, and service delivery across converged Voice-over-IP (VoIP), SIP, and MPLS networks. Observing every packet in a UC conversation and capturing network call metrics requires an element (probe/analyzer) on the network to track key measures of call quality like MOS, jitter, latency, and packet loss in real time throughout the duration of the call. By providing critical performance information to executives and IT staff, these tools help ensure service meets required standards across any and all integrated voice, data, video, and collaboration solutions—every time, for every user.

> Real-time QoS tracking allows the IT professional to fully understand the user experience. It provides a more exact MOS than a post-call average and demonstrates how much of the call was impacted, and whether the impact was at the beginning, in the middle, at the end, or intermittent throughout the call. Without probes, the IT professional is left trying to extrapolate details from an incomplete, vague "picture" of the call.

Armed with this knowledge, managers and staff can confidently transform their company's infrastructure; effectively free up critical resources; and align their IT initiatives with business objectives. And these issues really matter. In a recent Frost & Sullivan survey of almost 2,000 IT decision makers around the globe, respondents ranked "ensuring network stability and reliability" and "aligning IT investments with broader business goals" second and third in importance, respectively (dealing with security threats ranks No. 1, but proper network management can help with that, too).

Real-time Voice Quality of Service (QoS) Metrics, Source: Nectar Services Corp.

Of course, it's important to choose the right tool to eliminate monitoring gaps and achieve desired results. A good one should include a range of capabilities, covering basic network health and advanced monitoring, reporting, and diagnostics for products from multiple vendors. Frost & Sullivan recommends deploying a suite of services, including:

1. **Network Health and Performance** Monitoring should offer a single view of all voice and data traffic, a clear and usable dashboard, notifications and alarms as needed, and real-time as well as historical performance data. Graphical displays should make it easy to quickly see what's working and what's not, while advanced analytics can help managers determine where and when to tweak their infrastructure to attain better results.

2. **Diagnostics** tools take basic reporting one step further, helping companies manage multi-vendor environments, lower their total cost of ownership (TCO), and boost their return on investment (ROI). Real-time monitoring linked to specific diagnostic capabilities makes it easier for network managers and help-desk employees to identify and address problems as soon as they happen. Look for a solution that uses analyzers (or probes) to provide visibility into manufacturer gaps, locate calls down to the router and packet levels, alert you to bandwidth issues during multi-media use, and help isolate the causes of poor call quality.

3. **Active Monitoring** capabilities make it easy to benchmark and assess network performance before troubles arise and ensure you can meet whatever Quality of Service (QoS) metrics you provide for your organization.

4. **Call Monitoring and Analysis** should include a complete set of CDRs from UC platforms and SBCs —and a detailed accounting of what those records mean across the organization. Robust reporting capabilities and complete diagnostics should allow you to lower your calling costs without any loss in quality, even in multi-vendor environments. Scalability, savings, and meeting all regulatory requirements are critical components of any call-analysis program.

Communication and collaboration are mission critical in today's always-on, always-connected workplace. But as companies deploy a complex web of UCC applications and services to a growing number of remote and mobile employees, they are faced with a new challenge: monitoring network traffic and performance to ensure all users have an excellent experience every time they place a call, launch a conference, or initiate a video meeting. Relying on the tools that come built into enterprise applications isn't good enough—they often miss data, overlook poor performance in favor of better outcomes, or ignore key information altogether (and they don't cover consumer tools like Slack and Dropbox). Instead, IT managers should deploy a full suite of network monitoring and management solutions that can deliver robust, complete reports—and the analysis to enable proactive and reactive responses in real time.

TIPS FOR SUCCESS

Be careful of third-party tools that merely copy manufacturer-provided data into pretty reports and dashboards. While useful, they won't fill in data gaps or provide independent and complete information on the quality of every call, regardless of device type—leaving you blind to the user experience.

NEXT STEPS

- **Schedule a meeting with our global team** to experience our thought leadership and to integrate your ideas, opportunities and challenges into the discussion.
- Interested in learning more about the topics covered in this white paper? Call us at 877.GoFrost and reference the paper you're interested in. We'll have an analyst get in touch with you.
- Visit our **Digital Transformation** web page.
- Attend one of our **Growth Innovation & Leadership (GIL)** events to unearth hidden growth opportunities.

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