

Keynote Voice Perspective

Keynote Voice Perspective—Measuring the user experience of VoIP Service Quality: “There is nothing like it”

With over 6.9 million users already using VoIP in 2006, Internet telephony has now become a mainstream technology. Market Research done by Harris Interactive (published by eMarketer.com) has shown that one of the strongest barriers to VoIP adoption is subscriber concern about poor voice service quality. Keynote Voice Perspective offers a unique view of the customer experience of voice service quality. Measuring and managing customer experience will not only give you a competitive advantage, but will also help you reduce the customers churn.

Keynote Voice Perspective®

Operational Performance Monitoring

Proactive management of customer’s service quality experience

SLA Compliance Reporting

Trusted third party tracking promised versus delivered service levels

Competitive Intelligence Reports

VoIP providers can benchmark themselves against their competitors

Hosted Service

No CapEx, no maintenance cost

What Existing VoIP Monitoring Tools Don’t Tell You

Most VoIP monitoring tools today are network focused and take an inside-out approach by measuring the network jitter, packet loss, and latency in the core network. However, network issues may not entirely represent the user-experience since audio problems arising in the last-mile with adapters and ISP access beyond the network edge are not captured. Additionally, with the growth of Internet and mobile telephony, calls traverse over hybrid networks including packet

switched networks, Public Switched Telephone Networks (PSTN) and cellular networks. To understand the customer experience of voice service quality, you need a tool that can measure the true end-user experience.

Why Voice Perspective?

Voice Perspective provides a spectrum of benefits to address the business needs of VoIP service owners and operations managers of your organization. Voice Perspective provides a holistic view of voice service quality that includes Voice Audio Clarity, Service Reliability, and



Responsiveness. Operations manager can actively analyze and triage voice service quality metrics utilizing various views (charts, reports, trend alerts etc) provided by this service. Utilizing waveform analysis of the call audio, Voice Perspective enables you to experience what your customers are experiencing. Keynote offers service quality monitoring from its public locations (New York, San Francisco, and Dallas) or sets up a customized private infrastructure to meet specific needs of the customers.



Voice Perspective Operational Performance Monitoring Portal

The Operational Performance Monitoring component of Voice Perspective offers service providers and enterprises a window into the customer experience of the voice service quality through a portal. This capability also shows service quality trends for the monitored environment over a selectable period of time. Keynote Voice Perspective monitors voice service quality independent of the carrier type. Therefore, it also provides customer experience of the voice service quality for wireless networks. A mobile service provider can utilize

Voice Perspective to assess the impact of environment changes (e.g. replacing a Long Distance carrier backhaul with an IP-backbone), or different handsets on the customer experience of voice service quality. The SLA Compliance Reporting will provide Voice Perspective users a concise view of "desired versus delivered" voice service quality levels. A trusted third party SLA compliance reports by Keynote will:

- Allow Enterprises to get an independent view of hosted VoIP service provider's compliance to service level agreements.
- Enhance a managed service provider or hosted service provider's credibility and allow providers to create service differentiation based on guaranteed voice service quality.
- Helps call-centers and outsourced companies create service differentiation based on the capability to provide their customers trusted third-party SLA compliance reports.
- Allow companies outsourcing their call-centers to monitor compliance to the SLAs offered by the outsourced company.

A Voice Perspective user may then utilize Operational Performance Monitoring capability to analyze factors contributing to the SLA compliance breaches.

How Voice Perspective Service works

Voice Perspective is a hosted service that is managed and maintained by Keynote. Based on customer inputs, Keynote has identified voice service target markets and established Voice

Perspective agent infrastructure to configure a caller-receiver topology. This infrastructure includes placement of calling agents in residential locations to make active, uniform, and consistent measurements taken at a regular frequency. Calls are automatically placed every 30 minutes for each caller-destination city pair over the monitored VoIP service on various connection types (DSL / Cable / Business Class). For each call placed, Keynote collects detailed network metrics during the call establishment phase as well as during transmission of audio payload. Additionally, Keynote conducts audio fidelity analysis to identify issues such as hum, hiss, static or clipping that affect the user experience. Customers can use Voice Perspective portal to analyze voice service quality performance in various cities over various connection types and identify contributing factors to underlying performance issues. Utilizing voice service quality trending information provided by Voice Perspective, providers can implement infrastructure tuning or software upgrades to enhance their competitive edge. Understanding the customer experience will help providers address dissatisfaction factors proactively, maximizing customer satisfaction.