Guavus Ops-IQ Mobile Voice Analytics

Real-time visibility into mobile digital voice service experience

Mobile Voice Quality: It's not just a network operations issue.

VoLTE, VoWiFi or VoNR. It has to work right. Every time.

Your customers depend on the integrity of your mobile network for streaming digital voice services. You know that voice services can be impacted by other operators, by location, time of day or other factors and **may not always meet the expectations of consumers**. But monitoring customer quality of experience (QoE) has traditionally been a complicated effort.

First you need to work with **metrics that accurately reflect the experience** subscribers are having in as close to real time as possible. Even when you have access to accurate metrics, they can often be difficult to act upon.

Beyond solutions telling you that your network is fine, you need to know that **everything is fine from the perspective of the customer**.

Question your customer experience:

When all you know is that a problem exists, you cannot make evidence-based decisions that are customer-centric.

Don't use network performance as a proxy for customer QoE
Service Operations are customer-centric.

"My network is running properly, so customers must be having a good experience" is **an assumption you cannot afford to make**.

As the complexity of network monitoring increases, **efficiency will play a major role** in determining which MNOs come out on top. Whether it is 4G VoLTE , VoWIFI or the uptake of 5G VoNR, the wasted time and hidden cost spent trying to figure out what is wrong, only to then focus attention and resources on the network issues that may not have the most significant customer impact is inefficient.

This lack of visibility on the subscriber voice quality of experience and failure to correctly prioritize service issues can leave your unsatisfied customers' concerns unaddressed. **Your NPS can suffer and so can your bottom line.** Not to mention the silent churn – customers who leave without giving any indication beforehand.

Prioritize differently.

Customer-centric Service Operations considers:
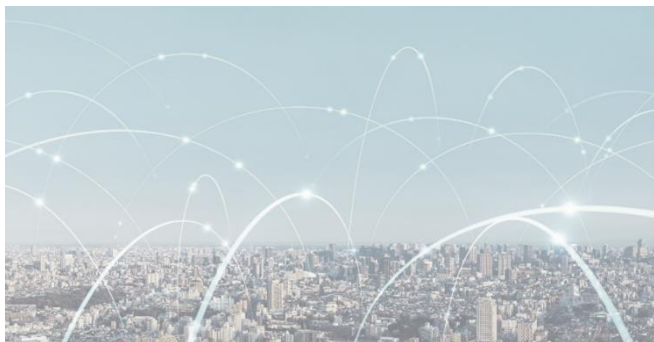
Severity of the degradation ?

How many customers are affected ?

Fix our network or customer's device ?

Customer Experience, for informed Service Operations.
Customer experience is king.

Network-centric Operations

to

Customer-centric Voice Service Operations

Analog to Digital Voice Service Evolution

o Analog vs VoIP vs VoLTE

o Fine tune the network for VoLTE services (handoffs)

o MNOs think "Network Performance"

o MOS introduction unveils gap between Network Health and Customer Experience

Evolution of the Digital Voice Service

o Voice Services are table stakes and have a direct impact on NPS

o Manage complexity: multiple devices, multiple networks

o 5G increases the need for customer experience awareness: SLA, B2B, Emergency Services, VoWiFi continuity

Guavus Ops-IQ Mobile Voice Analytics
Add customer experience to your network monitoring.

Guavus **Ops-IQ** Mobile Voice Analytics is a real-time service experience analytics application which provides autonomous anomaly detection on your digital voice services and actionable intelligence on your customer experience from the call-level to the network level.

By prioritizing intelligence that reflects the experience of a customer in real time, you can **transform your operations to be customer-centric**. Transition from relying on traditional network centric KPI's to assume your customers' experience. **Enable your Service Operations with prioritized customer-centric intelligence** to know definitively what your customer QoE is despite what your network performance is reporting.

Knowing how your customer experiences your network will help you to **boost performance, reduce churn and improve NPS.**
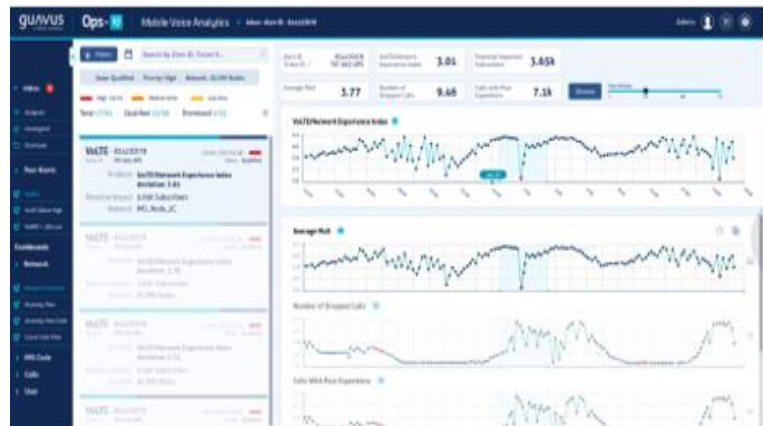
Actionable Intelligence for Customer-centric Response

Customer Micro-segmentation
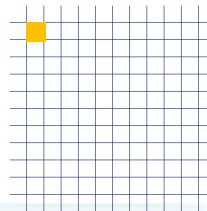
Anomaly Detection

Advanced Analytics
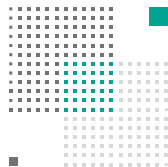
An aggregated view of network or service quality is insufficient for taking immediate remedial action against service degradation.

Guavus enables MNOs to manage service issues at a per subscriber and per device level so that targeted action can be taken to resolve those issues with the customer experience in mind.

Ops-IQ Mobile Voice Analytics self-learns from the network and service experience indicators to rapidly establish what constitutes a normal versus an anomalous experience.

Identifies the real-time impact of degradations, making it possible to act on them before they get out of control.

Service Experience Index (SEI) score is generated by ingesting and analyzing user plane data in real time to detect streaming service degradations from an 'outside-in' perspective representing a true customer experience.

Network Experience Index (NEI) score is generated by ingesting and analyzing network plane data to measure a service's network experience within those same granular customer microsegments. This is the 'inside-out' approach.

Enables real-time detection of an incident impacting NPS for mobile voice service and identification of the root cause supporting service remediation and prioritization.
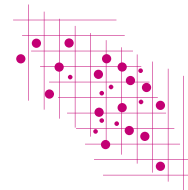
Real Performance Indicators (RPIs) to Detect Anomalous Behavior Automatically
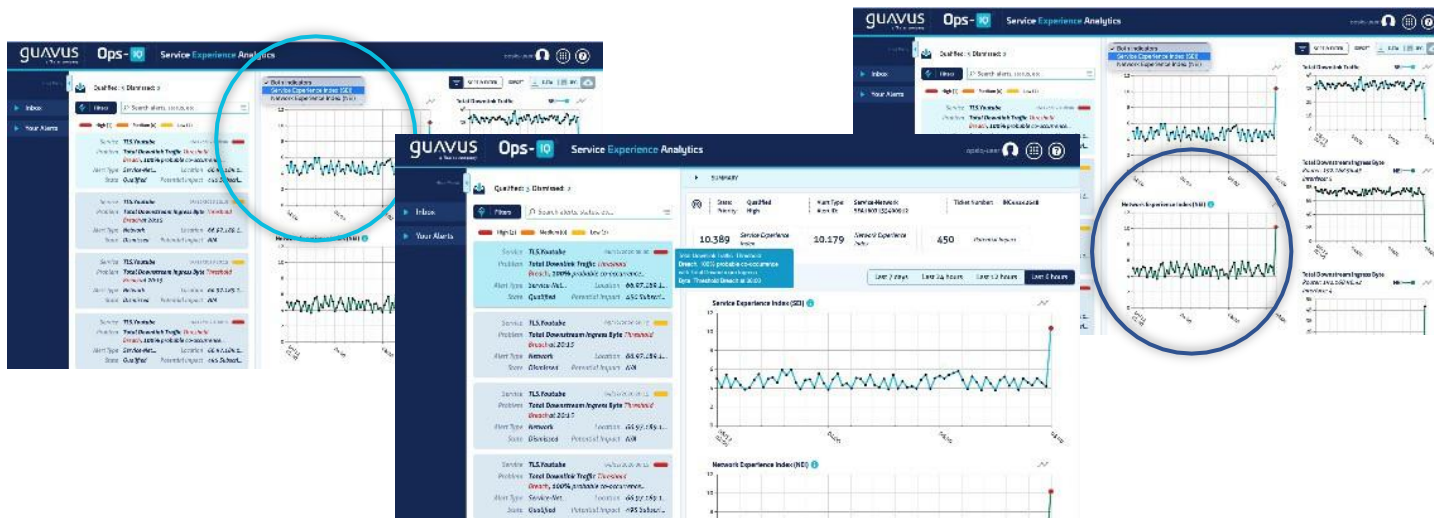
Guavus **Ops-IQ** Mobile Voice Analytics is a new kind of service experience analytics application that requires ultra-fast orchestration, reacting within micro-seconds to dynamic changes in the network. It is more than a mere human can manage; therefore, artificial intelligence (AI) and machine learning (ML) will play a major part.

Ops-IQ Mobile Voice Analytics uses AI and ML models to self-learn from network and service RPIs to rapidly establish what constitutes normal or acceptable impairments, relative to impairments that are affecting end-user applications and directly impacting the customer quality of experience.

Detects degradations in Voice Experience Score using advanced ML techniques

Real-time Customer Experience Impact Analysis to Address Issues Proactively

Guavus **Ops-IQ** Mobile Voice Analytics provides real-time actionable intelligence to identify network problems and impacted customer micro-segments across service & network with potential root issues and micro segments. These alerts are based on Service Experience Index (SEI) and Network Experience Index (NEI), powered by AI to deliver customer-centric operations.

The alert represents a network problem leading to service degradations possibly impacting the customer experience and providing insights before network issues become customer issues. It also supports the service operations teams to proactively activate appropriate service remediation strategies before their KPI's and CX NPS are negatively impacted.

Why Ops-IQ Mobile Voice Analytics?

Voice over LTE (VoLTE)

VoLTE offers enhanced digital communication capabilities to end-users. The ability to monitor, measure and analyze all aspects of VoLTE calling is essential to guarantee high quality of customer experience.

Voice over Wi-Fi (VoWiFi)

VoWiFi frees up network resources by using local Wi-Fi networks to handoff calls and increases flexibility to provide service in buildings, particularly with 5G. To deliver quality voice service you need visibility to data that is actionable.

Voice over New Radio (VoNR)/5G

MNOs offering VoNR in cloud-native 5G Standalone networks can provide enhanced voice quality and much lower latency, setting the expectation of a better call experience for the 5G subscribers.

> MVA is a solution that supports radio and digital voice services on VoLTE, VoWIFI and VoNR.

Ops-IQ Mobile Voice Analytics applies customer experience analytics for digital voice services across converged networks.

Why Ops-IQ Mobile Voice Analytics?

Voice over LTE (VoLTE)

Ensure your customers' VoLTE service experience is optimal even when the network shows healthy KPIs.

Voice over Wi-Fi (VoWiFi)

Handoff to an unmonitored Wi-Fi infrastructure is a risk to customer experience.

Voice over New Radio (VoNR)/5G

Ensure the VoNR experience meet your customers' expectation as they connect to your 5G network.

✓ **Save time/costs on service issues identification and resolution**

✓ **Improve NPS to increase customer retention and augment revenues with Marketing upsell**

✓ **Tackle new revenue streams with 5G SLA-based voice services**

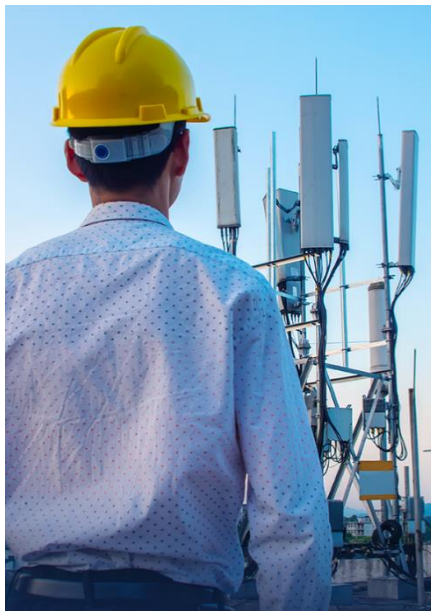MVA applies customer experience analytics for digital voice services across converged networks.

Why Guavus?

With our singular focus on 5G, expertise in 4G & 5G and vendor-agnostic approach, we can get you from here to there with peace of mind.

Pure-play analytics.

Transition expertise.

Future-proof solutions.

Uniquely positioned.

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