Detect and resolve performance issues before they impact your reputation

- **Discover** on- and off-net network performance issues
- **Measure** performance issues like latency and packet loss
- **Locate** the root cause of customer impacting service degradation
- **Resolve** service issues with in-depth insights into user's QoE

NetForecast®

NetForecast QMap

Real-time service performance analysis

There is an increasing dependence on quality connections - especially in the era of 5G and the IoT – and network service providers (NSPs) need a trusted source for end-to-end service performance validation. With services delivered over a complex path of individually controlled data centers, routers, multiple networks and 'last-mile' technologies, current speed tests and other legacy measurement techniques simply cannot discern an end-user's service performance quality. This leaves NSPs dangerously in the dark about the actual quality of experience they deliver, increasing the risk of customer frustration, churn and revenue erosion.

### Gain deeper insights – preserve and grow brand loyalty

NetForecast's Quality of Experience solution, QMap, uncovers service performance issues across this complex maze of interconnected networks, enabling NSPs to ensure a satisfying customer experience. Measuring users end-to-end network experience, QMap automatically uploads and aggregates this data into a sophisticated QMap analytics engine that creates near real-time reports and dashboard views of service performance. QMap's simple dashboard provides unprecedented visibility into massive amounts of user experience data, allowing NSPs to quickly ascertain the location of any performance issues and resolve those issues before they impact the user experience.

SPEED IS OVER - instead see application performance

Until now "speed" alone has been the primary metric used to "grade" network performance. NetForecast moves beyond this simple and often misleading approach, measuring multiple performance parameters and applying QMap advanced algorithms and artificial intelligence (AI) functions to deliver a holistic quality of experience (QoE) assessment.

Using a flexible combination of thousands of already-deployed end-point probes, iOS and Android-based applications that measure and report experience quality data directly from users' devices, NetForecast's QMap analytics document the user's endpoint experience by application type. This enables applications to
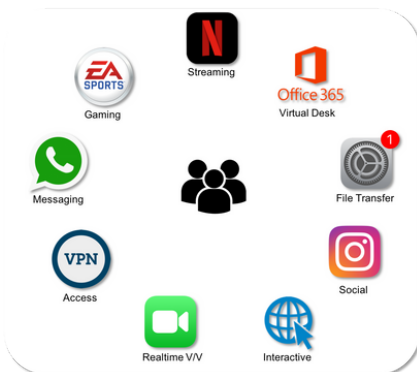
be profiled based on their sensitivity to network performance. For example, a winning online game experience requires low network latency and high bandwidth, while file transfers and streaming applications can deliver acceptable experience quality under high latency and low bandwidth conditions. This approach enables NSPs to tune their networks to deliver the best possible performance for the applications most important to their users.

In addition, QMap enables filtering by device type and delivery method (i.e., Mobile, Terrestrial, Satellite). The data from all sources is aggregated, analyzed, and reported on to provide NSPs with insight into how network events are affecting application performance at the user's location.

Isolate problem areas – fast-track detect and repair

You already know that subscribers simply don't care about network metrics. What matters most is when performance degrades to the point that they notice. While vendor defined Service Level Agreements (SLAs) may be helpful to set service expectations between a vendor and service provider, they only monitor a specific portion of the overall path.

The only meaningful SLA metric is that the "service stopped functioning." Even then, a user's content will likely reroute to an alternate suboptimal path, degrading experience quality while SLAs are still met because the service is technically 'functioning'.

NPS Calculation

NetForecast assesses end-to-end QoE to the level required to ultimately understand a NetPromoter Score (NPS).

NetForecast QMap alarms provide NSPs with immediate diagnostic data showing degradation severity and root cause, empowering you to quickly address performance impacting issues. Additionally, a record of current and historic incidents can be utilized to proactively manage elements on important paths to avoid future incidents and associated costs.

Why NetForecast – continuous and independent validation

Networks are dynamic systems in which change is the rule, not the exception. The only way to understand the behavior of a complex, ever-changing network, and its impact on the customer experience, is to dynamically and independently monitor it—from the users' point of view using the applications they use. *This is what we do.*

With decades of experiences designing, measuring and assessing network performance across most major US NSPs, we help service providers get to the root cause of customer impacting performance issues to improve quality of experience, enhance customer satisfaction, advance competitive position, and strengthen the bottom line.