

Solution overview brochure

# Get actionable

HPE Subscriber Network Usage Analytics



**Hewlett Packard**  
Enterprise

Maintaining a competitive differentiation in the communications industry means focusing on a strategic objective—ensuring actionable, improved customer experience and satisfaction.

The goal of customer experience management is well defined and a key objective in many CSPs' operations. Taking tangible steps to drive "actionable experience management" is not always straightforward. To successfully enable "actionable" customer experience, you need to continually analyze subscribers' use, trends, network conditions, interactions, and so forth across many dimensions—in real-time context and over time preferences.

## Better manage the customer experience

Subscribers today use mobile to manage their lifestyles—from purchasing, to reading, web navigation, communication, social networking, video and music consumption, downloading, and checking in at the airport—the list is endless. At the intersection of these events is a demand on communications service providers (CSPs) to better manage the customer experience—in areas in and out of their control.

In this mobile market, CSPs face challenges created by their own success. With mobile data traffic exploding, the revenue generated by this huge amount of data is not following a similar exponential-increase curve, and traffic is demanding extensive resources and investment on operators' networks. Not only is there a challenge in managing data traffic, but the market is evolving with ever-growing competition from Over-the-Top players such as Google™, Facebook, and YouTube. This lays additional consumption weight on the same mobile traffic pipe that already delivers services to consumers.

## Take tangible steps

While the goal of customer experience management is well defined and a key objective in many CSPs' operations, taking tangible steps to drive actionable experience management is not always straightforward. To successfully enable actionable customer experience, CSPs need to continually analyze subscribers' use, trends, network conditions, interactions, and so forth across many dimensions—in real-time context and over time preferences.

Maintaining a good experience for your subscriber community means an environment that monitors and analyzes Quality of Experience (QoE) key performance indicators (KPIs) across multiple sources in your operations and correlates them to identify trends and thresholds. It's the key to enable better personalized services, manage churn, and increase average revenue per user while optimizing and effectively monetizing the network.

## Get support

Better understand your subscribers' usage and interests and correlate that with network conditions and how it can impact their experience with Hewlett Packard Enterprise (HPE) Subscriber Network Usage Analytics. It provides a timely understanding of the mobile network and usage patterns, enabling you to drive actionable experience policies—whether it's a timely credit to a subscriber for several slow sessions or a subscriber-aware congestion control trigger.

Real-time analytics plays a key role in enabling customer experience management. Looking at historical and real-time data coming from structured and unstructured data sources helps inject information into your operations—driving customer experience improvement. With our solution, you gain real-time insight into each subscriber's service experience, enabling you to improve the experience in a context-aware, cost-effective manner and further monetize your network investments and subscriber's data by offering new services. You gain an understanding of subscriber behavior and current network conditions, letting you take action in real time to improve that subscriber's experience.

HPE Subscriber Network Usage Analytics solution comprises four key functional areas:

- Real-time or near real-time data collection from all over the CSP network—subscriber profile information, usage events/xDRs, network probe details, demographic information, location, and session information.

For example, if a high-value subscriber had five slow sessions within the span of an hour, a “trigger” might go to customer care and then a text would go to the subscriber giving a \$5 USD credit. Having a real-time view of the customer experience from multiple angles gives you the ability to take the right action(s) to:

- Ensure loyalty
- Fix network issues
- Provide personalized customer care
- Offer a tailored promotion or upsell

- Telco-specific data models and data processing and storage that correlates disparate information, making data available for fast access over multiple dimensions.
- Analytics and monitoring, focused on key QoE KPIs, help isolate potential problems or trends with near real-time outputs, such as customizable reports and dashboards providing real-time network state and user details. Examples include number of requests per cell, response time, errors and retries, and subscriber usage trends.
- Various KPIs and actionable intelligence for policy-driven events and notifications enable fast reaction to user’s experience when KPIs breach predefined thresholds.

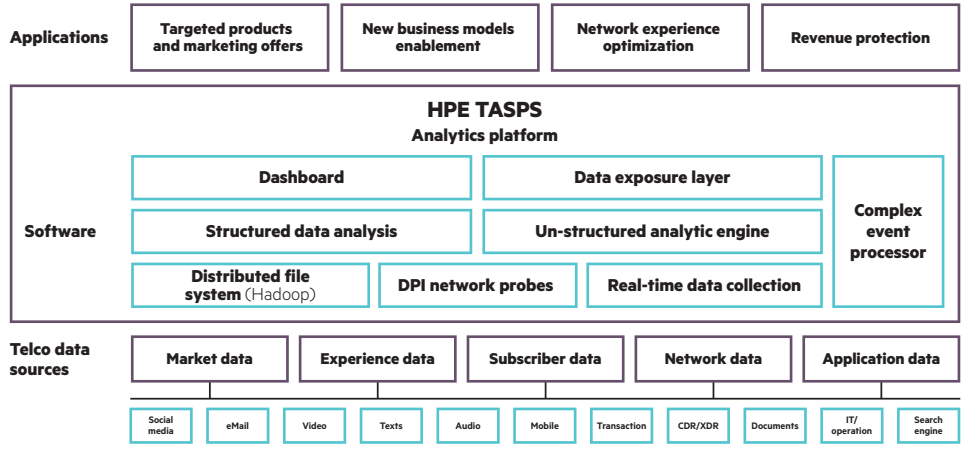


Figure 1: HPE Telco Big Data and analytics components

Table 1: Areas to proactively identify potential experience issues

SUBSCRIBER BEHAVIOR ANALYSIS	SUBSCRIBER EXPERIENCE ANALYSIS
<ul style="list-style-type: none"> <li>• Trend analysis</li> <li>• Usage analysis</li> </ul>	<ul style="list-style-type: none"> <li>• Error analysis, classification</li> </ul>

**Data analyzed across:**

Average speed	Error types
Volume usage	Abnormal session terminations
Percentage of hits	Service downtime/accessibility
Latency	Unstable data service connections <ul style="list-style-type: none"> <li>• Connection failures</li> <li>• Frequent connection drops</li> </ul> Non-satisfactory network speeds <ul style="list-style-type: none"> <li>• Slow upload/downloads</li> <li>• High latency and Jitter</li> </ul> Incomplete page/content downloads

**Common Dimensions of Monitoring and Analytics:**

- Service plans
- Protocols (FTP, HTTP, etc.)
- Access locations (cell, geography, areas, cities)
- Status codes
- Devices
- Applications (Skype, Facebook, etc.)
- URLs (categories of browsing/usage)
- Subscriber segments (ARPU segments, experience segments, etc.)
- Products/subscriptions
- QoS parameters
- Content type
- Date/time (from minutes to months/years)

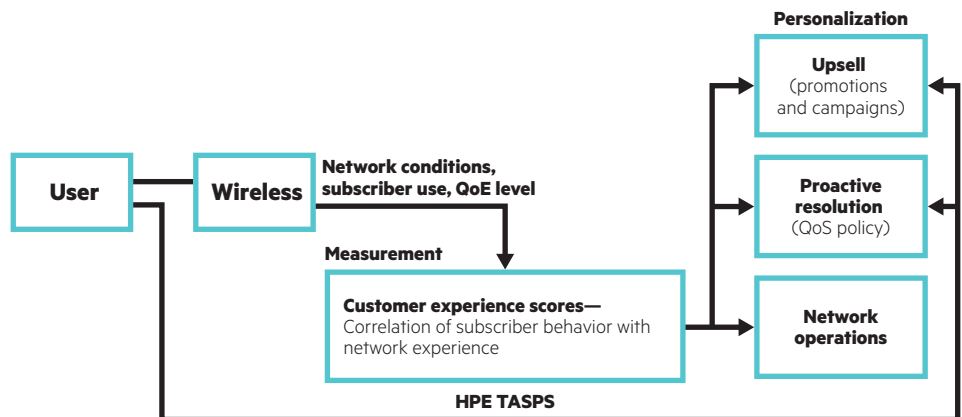


Figure 2: Measure and personalize to improve subscriber experience

## Leverage network analytics; improve customer experience

Figure 2 shows how HPE Subscriber Network Usage Analytics enables you to have operational and executive actionable intelligence to improve the subscriber's experience across multiple CSP operations.

### Stay in tune

In today's competitive communications ecosystem, providing the best experience to subscribers is crucial. It's not enough to claim access to products and services; you need to be in tune with your subscribers' behavior—in connection with your network conditions—at all times.

Use HPE Subscriber Network Usage Analytics to improve your capital planning. It provides timely access to actionable intelligence, which helps optimize network utilization and real-time response to traffic congestion situations. And by correlating network and subscriber information, you can personalize the network experience of individual subscribers in a cost-effective manner.

Choose Hewlett Packard Enterprise as your partner. Let us help you implement your plans for the future of your business.

Learn more at  
[hpe.com/CSP/TelecomAnalytics](http://hpe.com/CSP/TelecomAnalytics)



Sign up for updates

★ Rate this document



© Copyright 2012-2013, 2016 Hewlett Packard Enterprise Development LP. The information contained herein is subject to change without notice. The only warranties for Hewlett Packard Enterprise products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Hewlett Packard Enterprise shall not be liable for technical or editorial errors or omissions contained herein.

Google™ is a trademark of Google Inc. All other third-party trademarks are the property of their respective owner.

4AA4-4648ENW, February 2016, Rev. 2