Cognitive Analytics for Customer Insight
A comprehensive, analytical approach to boosting customer satisfaction
Customer experience: see the full picture

The quality of the services they get is high on the list of priorities for communications service provider (CSP) customers. In fact, network and service quality is the second most important consideration for customers deciding whether to leave their current CSP. And with 26 percent of mobile customers likely to switch within a year, it’s a high priority for CSPs too.

With customers expecting to be able to watch any content on any device, maintaining and improving network and service quality is a complex task. It’s not helped by customer experience information being scattered across different CSP teams, making it hard for many CSPs to make sense of the abundance of key performance indicators (KPIs).

This lack of a complete overview makes it near impossible to take effective action to keep customers happy through an improved experience.

Nokia Cognitive Analytics for Customer Insight provides the full picture. It helps CSPs to advance from reactive reporting to predictive analytics and automated actions. It enables a CSP to adopt a truly analytical approach in which different teams, tools and processes are fully customer focused.

**Insights that generate action**

Cognitive Analytics for Customer Insight (formerly CEM on Demand) enables a CSP to boost its customer experience management, from any starting point. It provides actionable insights on every customer and cell. Its built-in analytics uses machine learning algorithms to tune these insights to the CSP’s needs.

The solution is built on advanced data models, a powerful content creation toolkit and flexible reporting, backed by use cases and Nokia’s long experience of implementing customer experience management for a variety of CSPs in many markets. We understand how to handle multiple data streams from a multivendor environment.

All this capability and experience is focused on improving customer satisfaction in mobile and fixed networks, automating more operational processes and growing CSP revenue.

Cognitive Analytics for Customer Insight complements a CSP’s big data initiatives to create what is possibly the industry’s richest set of actionable customer insights, based on open source software optimized to provide carrier-grade business intelligence.

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1 Nokia Customer Acquisition and Retention Study 2016
Creating business value through use cases

The cornerstone of Cognitive Analytics for Customer Insight is a unique collection of use cases spanning different CSP teams: marketing, customer care, operations, and management.

Incorporating Nokia’s knowledge and experience gained in hundreds of deployments, these use cases include customer-centric reports and dashboards that address different CSP customer experience needs.

1. **Marketing and sales**
   Identify and isolate network and customer problems to help prioritize those that most affect customers. CSPs can ensure high service quality in hotspots, discover the most problematic areas for VIPs, find which devices are causing the most issues for enterprises, and much more. Based on these insights, CSPs can target specific promotions to affected subscribers.

2. **Operations and engineering**
   With proactive resolution of issues that affect customers, CSPs can be more efficient in their daily operations. This is achieved through near real-time service monitoring of network experience. For example, identifying devices that are causing high signaling in the network, or finding network sites with high traffic.

   This also helps CSPs prioritize network rollout and coverage needs based on customer experience insights.

3. **Customer Care**
   This details a customer’s use of data, voice, and SMS over the last seven days. Customer care agents can easily get all the details of a customer’s service transactions, helping to improve efficiency by solving many issues at the first point of contact and resolving network, service quality, coverage and provisioning related issues at the first point of contact.

4. **Management**
   Customer Experience Index (CEI) is a single KPI with a value between 0 and 100 for easy visualization of the customer experience down to the individual subscriber level. Reflecting the Net Promoter Score, CEI for aspects such as Voice over LTE (VoLTE), fixed access, billing, and charging enable a CSP to understand the customer experience with unprecedented detail. What is the experience of iPhone users? What is the experience in a specific region? These and many other questions can now be answered with ease.
Experience and expertise CSPs can trust

A modular architecture and proven software solutions for 2G, 3G, LTE, VoLTE and fixed connectivity are the foundations of Cognitive Analytics for Customer Insight. Its built-in analytics framework for machine learning algorithms matches CEI and other insights to the needs of the CSP.

With a library of more than 200 use cases for Operations, Marketing, Customer Care, and Management, the solution uses a powerful data model that combines network, IT and device data with over 15 dimensions for every customer. More than 50 pre-integrated solutions are available for the network, IT, devices and surveys.

Safaricom puts the customer at the heart of all decision-making

Safaricom Kenya aimed to put the customer at the heart of all its decision-making. The CSP uses big data technology to derive real time insights from its network, customer and revenue touchpoints. With such insights, Safaricom is better able to provide proactive customer care, resolve network issues and prioritize capital expenditure. It has gained many business benefits, including:

• Cutting the time taken to retrieve subscriber records for customer care from up to six hours to just 15 minutes
• Cutting the time taken to obtain customer satisfaction scores for the entire network from 30 days to near real-time
• Cutting the time taken to determine the root causes of service degradations from 24 hours to ten minutes
• Ensuring network-related issues are put into context with a real-time understanding of the customer impact.

“Orange is also leveraging customer experience management technology to provide more targeted improvements to the customer experience. It is using the Nokia CEM platform in France to detect poor indoor mobile coverage and target femtocell sales at affected customers. It claims this helped to halve subscriber churn rates. The solution has also been deployed in Spain. Orange is targeting 4G cell site deployments based on customers’ experience in the network.”

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With state-of-the-art software, hardware and services for any type of network, Nokia is uniquely positioned to help communication service providers, governments, and large enterprises deliver on the promise of 5G, the Cloud and the Internet of Things. http://nokia.com

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