Accanto Customer Experience Management: How CSPs Cater to Valued Customers

The Next Big Thing – Intelligent Customer Experience Management (CEM)

We live and work in a mobile, cyber-social society with high expectations for instant, personalized service. It takes sophisticated communications technology and real-time access to big data analytics to meet these expectations. Ovum Research reports that Communications Service Providers (CSPs) have put Customer Experience Management (CEM) at the top of their agenda, and the telecommunications industry has become a fertile ground for analytics*.

CSPs are keen to personalize and promote their service plans around consumer habits – live content streaming, video sharing, online gaming and more. To compete and win, CSPs need to deliver a superior customer experience, for every subscriber and every service. Innovative CSPs are meeting this need with Accanto’s Intelligent Customer Experience Management (iCEM) platform, powered by The Actian Analytics Platform.

Accanto iCEM combines Customer Experience Management, Business Analytics, Customer Driven Operations and Network Analytics in a single enterprise-wide platform that runs on the Actian Vector Analytic database. Accanto does away with silos and aggregates customer, device, and network data to enable Quality of Experience (QoE) monitoring and analysis down to the individual subscriber level. This is accomplished through real-time big data analytics enabled by Actian Vector. With iCEM, operators gain a real-time 360° view of every customer and actionable insights to improve every communications service.

Use cases for mobile and fixed line operators include Optimized Network Planning, Super SOC, Advanced Monitoring and Troubleshooting, Customer Behavioral Analytics, Proactive Customer Care, Billing and Revenue Assurance, and more.

According to Markus Weiland, Head of Product Management at Accanto, “Today, CSPs need to know how their subscribers are using internet apps and services from a network and device perspective. They need to know if their customers are able to access, on demand, the services they need, and for the purpose of network optimization, which services should be prioritized for customers.”

“The biggest challenge has been the complexity of underlying technologies and number of various data sources,” Weiland explained. “We are dealing with 3G and 4G, while 5G is on its way along with WiFi access and hot spots. The technology domains are extremely complex. Thousands of operating systems provide a continuous information flow that requires intelligence to convert it to smart action.”

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*CEM: Why CSPs awareness of quality sets them apart in a best-effort world. Ovum Research, September 2014.
Flexing Analytic Muscles

Wieland continues, “To run CEM analytics, we have to utilize a vast amount of data from varied sources. It’s no longer just about network KPIs; today’s operators must monitor hundreds of different KPIs in real time. The question is how to bring all of this data together, understand the data flow, and translate it into actionable insights to make effective business decisions.”

The Accanto iCEM platform, powered by the Actian Vector Analytic database, has the flexibility to analyze continuous data streams from any type of data source, including:

- Network data from network monitoring systems
- Data from Operations Support Systems (OSS) such as performance and fault management
- Data from deep packet inspection
- Device-centric data (CEM tools, mobile apps, mobile web traffic)
- User data from BSS and provisioning systems (subscriber, service profile, data plan, etc.)
- Data from trouble ticketing systems

The iCEM platform operates in two modes, for real-time analytics and historical trend analysis. In both scenarios, it has the power to ingest big data and analyze it fast to provide actionable insights, making it possible for Accanto to target existing customers with relevant and timely upsell and cross-sell opportunities.

Going Big with Actian Vector in Hadoop (Vortex)

“Networks are getting bigger and subscriber numbers are growing,” Weiland said. “Scalability is a critical success factor for us and another reason we partnered with Actian.”

“Typically we support 50-terabyte data warehouses, but customers are already asking for petabyte scale solutions. Today, Actian Vector provides us with robust data storage and the ability to recall and analyze big data rapidly, with a roadmap for tomorrow.”

CSPs recognize the need for Hadoop. Partnering with Actian gives Accanto a clear roadmap to launch their CEM solution in Hadoop with Actian Vortex in 2015. As Accanto supports nationwide network providers with communities of 100 million users or more, all systems must be integrated and centralized with one iCEM. Actian provides Accanto the combination of exceptional performance and scalability needed to manage the volume of data plus time sensitive analytics to maximize the customer experience.

Getting Predictive - Actian Vortex

“Adopting Actian Vortex is a natural next step for us to build our next-generation iCEM platform. We’ll be able to offer advanced predictive analytics and give our customers direct access to SQL analytics in Hadoop. We will have the power to predict which network elements will be overloaded first, where specific capacity issues are most likely to occur, and our best opportunities to reduce or avoid churn.”

The Actian Analytic Platform offers future proof scale out and analytic functionality. As Accanto expands the data sets that require multi-node, distributed data management capabilities, the transition from single-node Vector to multi-node Vortex in Hadoop is seamless, requiring no application of query changes to get the scale of Hadoop-based processing.

CSPs increasingly expect to be able to utilize their Hadoop data sources. With Actian as a technology partner, Accanto can do custom integration and support direct SQL queries via Actian Vortex, without the need to do new adaptations or mediations, which can take months and introduce problems along the way. With Actian technology fueling its analytics, Accanto can save steps and avoid risk of delays and errors in data transfers, allowing it to close data integration projects much faster.