Pipeline

Knowledge Is Power

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Leveraging Network Intelligence for Better Business Results
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Financial success in today's communications market is driven by two levers: driving top line growth (revenue) while minimizing cost to deliver it. More than ever, the consumer holds tremendous power given the competitive nature of today's market and the variety of choices available to them.

For carriers, keeping up with customer needs is not for the faint of heart. Not only are there more customer segments that need to be served, but each segment has become more demanding, requiring unique product attributes at variable price points. For a large Tier-1 or Tier-2 carrier, there are significant challenges that must be overcome to deliver many personalized services to targeted customers.

Fortunately, a great deal of information already exists within the network that can reveal a lot about a carrier's customers. This information can be used for two key purposes: (1) to understand how a carrier's customers are using their services today in an effort to more accurately predict future customer needs and trends, and (2) to quantify the level of satisfaction a carrier's customers are currently experiencing.

Although the answers to this puzzle lie within the networks themselves, many operators do not have the information they need to make better business decisions that ultimately impact their success. What network operators need is what is referred to as "Network Intelligence," a broad concept that in practice is accomplished by collecting data from the network and turning it into actionable information that can be leveraged by multiple groups within the operator. Network Intelligence not only helps operators more efficiently operate their networks, but also make better operational and business decisions based on accurate, real-time information to ensure that the end-customer is truly satisfied.

Although the necessary data is flowing through the network, it is surprising that this information is not available for many operators in an easily assessable format that can be leveraged by multiple groups within an operator. Those operators who are empowered with Network Intelligence solutions can leverage the information to drive business results and gain significant competitive advantage in what is becoming a very competitive and uncertain market.

The Need for Network Intelligence

Today's telecom market is very competitive. Consumers have more choices than ever before as similar services are being offered by multiple service providers. Some operators have tried to compete on the basis of cost, while others try to continually differentiate themselves from the

competition by adding new services, etc. In either case, trying to wring your network of unnecessary costs or trying to more effectively bring new services to market are impossible goals to meet if you cannot quantify how your network resources are being used, or how satisfied your customers are based on their experience.

The importance of customer satisfaction cannot be underestimated. Financially, the cost of losing a customer (churn) is significant and is brought about by a customer's dissatisfaction with one or several of the following factors: discontent with billing/payment/credit options; handset choices; service features; service plan options; customer service; network quality; and price. In addition to the cost of losing a customer, there are costs associated with having to replace a subscriber (via marketing and sales), lost revenue due to early termination of the service agreement, the cost of returning subscriber equipment, in addition to any costs incurred by the call center processing the termination request.

In the future, the ability to quantify and track an individual customer experience will become more important and significantly complex. From a technology perspective, networks are migrating from individual, stand-alone networks to a single, integrated multimedia network. In addition to supporting the patchwork of underlying legacy networks, added complexity is also being introduced for a given user session related to signaling and media protocols, quality of service, etc. Although carriers face challenges and complexity in bringing multimedia and personalized services to the market, ultimately, the consumer does not care how hard it is to deliver those services. The consumer cares about the quality of their individual experience in using those services.

Today, we see many cases where the network is working fine in terms of delivering services and applications, but the consumer may be experiencing problems that the operator may not know about, such as the time it takes to download or set up an application or that the customer provision has been incorrectly set. Closing the customer experience gap – the difference between what your customers expect and what the network is delivering – is the key to ensuring customer satisfaction and retention. To close this gap, network operators require accurate, actionable information from every point where the customer touches the network, from the delivery of multimedia services and applications, to other touch points such as customer billing and customer care.

Network Intelligence: Turning Data into Actionable Information

Information is power – and having access to network monitoring solutions that collect data from the network, correlate it, and then make it available for upstream processing and analysis is fundamental to implementing a Network Intelligence strategy. At the same time, it is equally important to have the ability to get actionable information into the hands of those who are empowered to take action back downstream in the network. Departments such as network operations, engineering, customer care, marketing/sales or other OSS/BSS departments, all require accurate, real-time (or historical) information to make better decisions that impact their customers and how they are served.

To embark in a Network Intelligence strategy, your network capabilities must be aligned with your business objectives. For example, if you are a mobile operator whose value proposition is targeted at business users who require high-speed, reliable data services, then your network needs to be optimized for delivering high-quality, high-speed data services. In order to achieve this alignment, operators need to know what levers in their network directly impact the desired business outcome. As is often the case, there can be multiple sub-levers that contribute to a given lever that must also be identified. After identifying what levers impact a desired business outcome, Key Performance Indicators (KPI's) are then assigned to each lever. Depending on the nature of the KPI, a nominal

and threshold value can be assigned and monitored. In our high-speed data service example mentioned above, the key levers that impact our desired business objective might be levers related to the network quality of service, of which KPI's related to monitoring data rates, packet loss and delay might be used.

And finally, but fundamental to a Network Intelligence strategy, is the ability to cost-effectively collect and correlate signaling and media data from across your network. Depending on the amount and type of traffic specific to your network, probes are selected and placed at key points within your network to collect the right data that will be transformed into actionable information.

Better Business Results

Market dynamics and the realities of today's global economy have resulted in fierce competition in today's telecommunications market. To succeed, telecom operators must focus on the quality of their network and ensure that the customer is having a quality experience. This is not easy given the diversity of customer segments and ever-changing customer needs. By adopting a Network Intelligence strategy, multiple groups within a network operator are empowered with actionable information; meaningful, real-time information that allows them to more efficiently run their network, make better decisions that have a positive impact on customer satisfaction and retention and close the customer experience gap.