

Connecting With Your Customers – Linking OSS and BSS Information

By Scott Bryden

In today's world of the telecom service provider there is a dizzying mix of maturing technologies, evolving business strategies, changing regulations, competition, and complex service offerings. New providers, in addition to current operators, are appealing to specific customer needs, and enabling consumers to have even more choices, especially from the customer-savvy Virtual Network Operator (VNO) market. As many markets begin to reach a saturation point, our industry is quickly evolving to a world about profitability, not just market share.

The real money today isn't just about a network connection as in times past; instead it's a fight between traditional network operators, VNOs, and other entertainment outlets for the consumer's discretionary spending budget- e.g. gaming, identity services, video downloads, and a host of other content-specific services. It is this change in how consumers see communications services that is forcing all network operators to rethink their time-proven business strategies and to "get more real" about placing the customer first.

Retaining customers in today's competitive environment requires the development and management of intensive customer relationships including the need to continuously deliver an acceptable service experience. This has led to an emphasis on Customer Experience Management without which, operators can only guess about how well their customers are getting along. Most are painfully aware that their customers have a choice and will exercise their option to choose the service and/or content that meets or exceeds their expectations.

What is Customer Experience Management?

Customer Experience Management in and of itself is a methodology that implies a change to the traditional network-centric business model with a new one that places the customer at the center. A key for service providers implementing Customer Experience Management is a much stronger link between customer information and the network/service management tools now used today.

Detailed direct measurement of the customer experience defined through key business measures and analytics brings a strong focus on all aspects of customer service performance, creating an overall system of Customer Assurance.

How Things are Done Today

The traditional Service Provider approach has focused on managing a set of products delivered via an operator-owned network. Management of this network has been accomplished via multiple Operational Support Systems (OSS) each of which were focused on connectivity: The same Operators also have a set of Business Support Systems (BSS) that incorporate billing, accounting, customer care, and marketing support systems. Generally speaking, the BSS are "customer-centric" since many

BSS systems provide or support things that are involved in direct or indirect customer interaction. By comparison the OSS have been focused on "the network" or "the services", i.e. an operations team uses these systems to detect and diagnose issues in the service they provide, or the telecoms infrastructure that delivers it. In the past, with limited services and predictable call models, managing the network in itself was sufficient to assure good service quality. However, little awareness or consideration of an individual customer experience was provided via this network-centric OSS approach. As new services have proliferated and network complexity has exploded, the same basic 'network-centric' OSS strategy has prevailed until now. As many a NOC manager will attest to, all the lights can still be green but customer complaints continue.

What Winners Will Do in a New Environment

Customer Assurance begins at the network, which is the obvious source for the basic building blocks--- real-time, accurate, and highly granular customer-focused business measures. The ability to measure and manage individual customer transactions and exchanges associated with the contracted service is pivotal.

Implementing Customer Assurance involves a shift in business strategy to refocus on OSS capabilities to support this process. The key to this shift is that the actual measured customer experience must be linked to the traditional view of network and service management. The desired result is a customer aware OSS that provides the Service Provider visibility into the individual customer experience and how it is affected by network performance. This includes the ability to provide:

- Differentiation through objective, customized, and measurable SLA's which can be targeted to each customer's situation.
- A proactive and timely view of customer impact associated with network events or outages.

To implement genuine Customer Assurance, it is insufficient to simply take an 'inferred' approach from data available in legacy network and service management systems. This approach may give you an indication that end-customers should be able to access the network or service but a much more granular and direct "business measures" approach is required. This would provide both a 'wide angle' view combined with the ability to 'zoom in' on individual customer groups as required. The major difference in these strategies lies in the data sources feeding the respective OSS/BSS systems. Rather than trying to 'infer' the customer experience, leading measurement vendors are utilizing very different data sources to 'directly measure' the customer experience.

Unique Customer Assurance Insights Offer Significant Business Benefits

From these direct measurement sources, it is now possible to offer insights that go well beyond the wide-angle view of the network. A direct measurement approach

allows service providers to focus much more specifically at customer-level problems. Consider the following examples:

Marketing Departments – Within the traditional churn management process using existing ‘inferred’ data sources, here’s what they might know today about any given customer;

- Using a Manufacturer XX handset which is 3 months old
- Bought the handset at a retail store
- Pay bills on-time monthly
- Make calls to Customer Support on average 3 times per year
- Used 411 & SMS services periodically
- Network switch CDRs show 2 dropped calls/day

Conclusion = “My Customer Is Happy and a Low Churn Risk”

But, what if the real situation is as follows:

- 5 “fast-busy” attempts/day
- Drops 2 calls per day during regular commute, always at the intersection of 1st Street and Grant Ave.
- 5 failed dialing attempts daily due to weak RF signals within top 2 calling location areas
- New phone takes twice as long as previous model to authenticate with the network
- 4 failed handovers roaming into Partner’s network, hence in-session calls were dropped
- 2 failed attempts at downloads after first week of having the new phone.

Conclusion = Now What Does Their Business Intelligence Tell Them?

Customer Care - Within the incident management process (troubleshooting) what if you could “zoom in” on an individual customer service problem and go further to find the root cause of the fault in an automated fashion during the first call? All most customers really want to know is that when those important calls drops at just the wrong moment, their data service won’t connect or their picture message won’t send, their provider knows this too and can help.

Sales Account Management – What if you could proactively “zoom” in on the usage experiences of your top corporate customer groups to ensure, in real-time, that these customers are receiving the services “as they anticipated them” when originally purchased? This approach may serve particularly well in the cutthroat arena of corporate account management. In the tech-savvy mobile data world of many modern businesses, guaranteed levels of quality and reliability of service are essential, while price is a poor differentiator since it is easily matched.

Pipeline

Knowledge is Power.

Customer Assurance - How Do You Get There from Here?

We believe that it is the combination of the 'wide angle' and the 'zoom views' that provide the big picture and focused insights of the customer experience. The direct measurement approach enabling this involves network-signaling and customer session data. The majority of the world's service providers have already invested in probe based technology and use this direct measurement strategy within the Network Operations side of their business. Combined with next generation software probing techniques, pervasive measurements are becoming even more cost effective to deploy closer to the service end points. Service Providers implementing a Customer Assurance strategy should consider utilizing these very same measurements to derive genuine Customer focused business measures that can then be exploited by multiple facets of the organization.

Several well-known retailers—composing the ranks of nearly all of the VNOs today—are taking advantage of converged wireless/wireline technologies to get their branded products directly in the hands of paying consumers. With the rise of this new type of service provider, operators who don't recognize the shifting market focus toward the end-user will face almost certain annihilation as retail-based customer-specific services take hold. Welcome to the real world of competition where you'd better truly connect with your customers.