

## Customer Service Assurance: New Insights into the Customer Experience

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Service provider executives, marketing teams, and account managers are concerned with a growing number of customer-focused service quality and availability issues. Their concerns are poorly addressed with the tools traditionally used to monitor network operations, and the challenges will only grow more complex as data traffic continues to exponentially grow.

A proactive approach, however, is Customer Experience Management (CEM), which industry analyst firm Stratecast, a division of Frost & Sullivan, says is gaining favor as service providers increase their understanding of the relationship between customer perception of service quality and the longer-term business requirements for customer retention and managing brand loyalty.

Stratecast defines CEM as the business strategy for increasing service provider awareness and understanding of how customers perceive the level



of service they receive every time they have an “experience” with the company . This comes from multiple dimensions and can be broadly defined within two distinct business practices: Customer-Centric Quality of Experience and Quality of Service.

Customer-Centric Quality of Experience is the “big picture” focus of CEM. This encompasses whenever a customer touches a service provider, such as contacting support with a problem, buying a new handset at the retail store, paying a bill, checking an account balance or upgrading service options.

Customer-Centric Quality of Service, also

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known as Customer Service Assurance (CSA), delivers a continuous measure of service quality, understanding both when a customer is experiencing levels of service quality as promised and when quality is below expectations. CSA can concentrate on an individual, corporate group, demographic region within a large enterprise, or a geographic area.

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According to Stratecast, Customer Service Assurance is the process of collecting customer usage information from all practical sources as close to the customer as possible: the subscriber plane (mobile devices and endpoints), the network plane (elements, nodes, systems and management databases) and the control plane (core network

signaling equipment). A CSA strategy uses this data to gain deep insight into customer behavior pertaining to the relationship of service quality with service uptake and service usage.

While a CSA-based business strategy is difficult, Stratecast believes it brings significant rewards through increased awareness of what service combinations customers really use, along with an indication of what they may want in the future. This enables service to more efficiently address internal operations needs involving service planning, network planning, partner relationship management, billing and strategic marketing.

The following examples represent several real-world customer-centric solution implementations our service provider customers have achieved.

**Optimizing Mobile Web Access Experience**

Subscribers expect the same high speed Internet experience on a mobile device at a reasonable cost as they receive in a fixed-line environment. They want to access information quickly and accurately for business and personal needs. Because they are mobile, customers visit different websites due to content and geographic relevance. Further,

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these sites need to be easily accessible by mobile devices to provide a positive customer experience. Service providers are interested in knowing which websites offer the highest mutual benefit for both the mobile subscriber and the operator. Many

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service providers arrange payment agreements to enable their subscribers to access websites from their mobile devices. In return, Web portals are partially customized to meet certain operator needs. The operator desires to minimize customer churn in the highly competitive environment where new data solutions and platforms are frequently available. Service providers need to know where the highest traffic is generated and where subscribers are experiencing issues with the data network. To understand the use and success rates of websites from mobile visits, the service provider reviews statistics on both subscriber behavior and on performance of a mobile-enabled website. Typical data points are: URLs accessed, Web pages accessed, time spent on each website and average time for Web page to download. The aggregate data can be compared with additional information including type of handset, available bandwidth and specific subscriber experience measures by website. Because the service provider often pays the domain for access, the operator can use this information to negotiate payment agreements, services, response rates and other parameters that help to ensure devices on an operator's mobile network are gaining value from the website agreement. Additional tools showing valuable aggregate

information include:

- Overall website efficiency: based on the number of requests versus number of pages served and average time between request and response
- Available bandwidth: the data volume per page served per URL
- Calculation of top 50 URLs
- Ranking of URLs with high levels of traffic

Using these metrics, the operator can also determine the most popular and least popular websites. This information can be used not only for handling relationships with website operators accessed through the mobile domain, but also may provide input to an operator's product development group.

#### **Mobile Subscriber Inconsistent Roaming Experience**

Subscribers expect to receive reasonable roaming voice minute pricing along with voice and data service quality consistent with what is enjoyed at home, in nearly every international country they visit. But when they travel internationally, their smartphones register with an in-country network based on network quality, agreements with the home location service providers and network availability. Depending on network quality, subscribers may have difficulty temporarily accessing services available on their home networks.

Customer expectations are often much higher than the actual roaming experience received. When roamers are dissatisfied with the quality level of services within a visited network, they often complain. This may prompt the home operator to re-assign partner priorities for all of its customers depending on the nature, severity and number of complaints received about a partner. If the home operator does not proactively identify issues through roaming or customer interactions, failure to resolve the issues risks losing roaming customers to other service providers. Most often, those roaming subscribers are the business or other high-value customers that service providers most desire.

The visited operator, on the other hand, wants to know the performance of roaming customers on its network because roaming revenue is a strong component of its income portfolio. The visited service provider needs to identify service issues so that its partner networks receive positive subscriber feedback. The visited operator also needs to meet service expectations of all roaming subscribers to retain them on their network. The operator can negotiate pricing on partner networks, but must demonstrate the availability, quality and efficiency of voice and data services for its visiting subscribers.

To monitor the mobile roaming experience, the visited operator tracks efficiency of all network services per roaming network subscriber. The visited operator can also deploy a system to trigger short message service (SMS) alerts to anyone roaming onto its network to let roaming customers know about available services as a result of their connection. The visited operator can then prevent its partner operator from choosing competitors because of its performance analytics.

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#### **Mobile Customer Service Preference Analysis**

The mobile user device has become a part of the cultural experience. A growing percentage of customers rely on access to certain data applications and websites to address day-to-day business issues and to satisfy a long list of personal needs. Customers therefore expect an always-on service, and disruptions for more than a few seconds a day, if they occur repeatedly, could provoke a customer to move to another service provider. Service providers often segment subscriber profiles to better understand usage patterns and provide

marketing departments with intelligence to better serve customers. For example, an operator is interested in developing aggregate statistical subscriber profiles based on data or services



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usage, Web browsing usage, most frequently used network locations, billing profiles (prepaid and postpaid) and corporate customers. By analyzing groups along these lines, operators can improve the customer experience and quality of service by adapting the network to the various usage profiles of subscribers on the network.

If the service provider can better understand, through direct measures, how mobile devices are integrated into customer lifestyles, it can take advantage of building more significant subscriber relationships. These may include:

- Offering advertising-sponsored services for a specific customer profile
- Supplying transportation-oriented services to a customer demographic group
- Providing location-specific informational services to both business customers and consumers within a geographical segment.

An operator captures a wide range of information

to define subscriber group populations. For example, people accessing the Web at the same train stop each day between 8 and 10 a.m. may exhibit similar subscriber usage behavior. Service providers' marketing and service development teams could use this type of information to push SMS advertising to these customers for a typical usage pattern at that location within that time of day. In addition, operators can offer services that may be related to general user interests coinciding with other location or time-of-day patterns.

### **Conclusion**

Customer Service Assurance can be called the most critical part of any Customer Experience Management strategy for the converging communications marketplace. CSA gives service providers a new ability to measure the effectiveness of the services that customers purchase and an understanding of how they work each time a customer accesses them, validating if customers receive the services at the levels they expect.