
White Paper

Customer Experience Management

Abstract

The continued growth of mobile industry revenues depends to a large degree on the adoption and success of mobile services. In order for an operator's offering to be truly successful, the shift from managing networks to managing customers needs to happen. Operators must actively monitor and manage the experience their customers have while using their services.

Today's networks do not allow the definitive QoS experienced by mobile customers to be monitored and therefore managed. Network operators have identified this as being one of the key challenges facing the industry today.

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Customer Experience Management

The continued growth of mobile industry revenues depends to a large degree on the adoption and success of mobile services. In order for an operator's offering to be truly successful, the shift from managing networks to managing customers needs to happen. Mobile operators must actively monitor and manage the experience their customers have while using their services. A high-quality experience will influence positively on the customer's view of the operator brand and enhance its value.

Unfortunately, today's networks do not allow the definitive quality of service experienced by mobile customers to be monitored and therefore managed. Network operators have identified this as being one of the key challenges facing the industry today. This challenge can be broken down into two main areas;

- *No real-time view of the actual quality delivered to the customer*
- *No mechanism to target network operation activities towards the most valuable customers*

Customer Experience Management (CEM) addresses these challenges head on. It collects the vital statistics with the granularity needed to efficiently manage these services and ensure a high quality experience.

CEM turns these statistics into customer experience knowledge as it allows the operator to build an understanding of the customer's definitive experience based on a number of Customer Experience Indicators (CEIs). It provides an understanding of how the customer's experience affects behaviour and provides the input needed to optimise the network performance where it matters most to high ARPU customers.

The features of CEM will benefit a number of functions in the operator organisation:

- *Network Quality Department*
 - ✓ *Enables accurate monitoring of the network and service quality that was actually delivered to a customer or group of customers*
 - ✓ *Provides the information needed to bridge between the perceived quality and the quality actually delivered*

- *Operations*
 - ✓ *Provides information on where to fine-tune the network for an enhanced customer experience*
 - ✓ *Enables the focus of the departments efforts to be set according to the corporate focus of the operator*

- *Marketing & Sales*
 - ✓ *Adds context to existing network statistics and customer satisfaction surveys correlating it with usage statistics per customer, service and location*
 - ✓ *Provides support to the process of building a brand experience*
 - ✓ *Provides Account Managers with detailed reports on the actual level of service provided to the accounts*

- *Customer Care*
 - ✓ *Allows Customer Care to be pro-active in their interaction with customers rather than re-active in waiting for a customer complaint*
 - ✓ *Enables the build-up of customer profiles*

The Challenge

The mobile services market has been hyped to the extreme and Customer Experience Management (CEM) is the only viable way to regain control of the customer's experience and manage it moving forward. Traditionally mobile operators have to a large degree managed their operations based on a network or technology view of the network. However as customer growth levels off and prevention of churn becomes critical, many operators are realising that the network view alone is not sufficient for their business.

In order to drive widespread adoption, it is important to greatly enhance the quality of the customer's experience of these new services. Today's networks do not allow the quality of the customer experience to be monitored and therefore managed, and network operators have identified this as being one of the key challenges facing the industry today. The challenge can be broken down further and be described as being;

- To **measure** QoS as experienced by customer in real-time
 - Gap in the statistics available and necessary to measure customer-based QoS
 - Lack of tools supporting this approach

- To **guarantee** customers a satisfactory level of QoS
 - Lack of tangible input for successful SLA management

- To **manage** customers' QoS expectations
 - Lack of sufficient measuring methods and management tools
 - No mechanism to target operations towards a specific set of users

- To **succeed** in launching services
 - Lack of methods to manage the initial subscribers
 - Lack of tools to ensure that customers' demands are met and that the mobile services generates revenues

The Solution

The CEM technology offers a solution to this problem.

Features and benefits delivered by this technology

- **Measure** QoS as experienced by customer
 - ✓ Provides customer-centric, real-time measurements
 - ✓ Allows QoS per service to be associated to customer and location
- **Guarantee** customers a satisfactory QoS level
 - ✓ Provides crucial input to the SLA process
 - ✓ Enables the establishment of customer profiles
 - ✓ Provides Customer Care and Marketing & Sales with information of how the customer perceives the QoS
- **Manage** customers' QoS expectations
 - ✓ Provides the management tool needed to offer customers a satisfactory level of QoS
- **Succeed** in the launch of mobile services
 - ✓ Exceed customer expectations
 - ✓ Enhance customer satisfaction and loyalty
 - ✓ Turn customers into advocates for the operator's offering
 - ✓ Increase ARPU

Turning network statistics into customer experience knowledge

By adapting a CEM approach, the operator can gain a detailed and accurate real-time view of what the customer actually experience when using a particular mobile service. This information is a prerequisite for any process aiming to improve the customer's view of the mobile service and the quality delivered.

These statistics include:

- Was customer Mr Smith able to use the services on your network when he wanted to?
- Did the service provide the level of quality that he expected?
- Was he able to complete his business and exit the service successfully?

CEM turns these statistics into knowledge as it allows the operator to build an understanding of not only what the customer experienced but also when, why and with what equipment/handset. It also provides the input needed to optimise the network performance where it matters most to the high ARPU customers. In addition it allows the operator to understand how the customer's experience affects his or her behaviour. This kind of information cannot be readily extracted from the statistics available in today's networks.

Driving Mobile Revenue

Customer Experience Management provides an operator with the information and tools needed to focus its network management on the most important factor of all, that of the actual customer experience. It allows an operator to quickly detect and fix any problems in the network before they impact negatively on the user experience. It also provides a benchmark to drive continued quality improvement.

It gives an understanding of how a mobile service is behaving in the eyes of a customer, and the improvements that needs to be made to increase the quality of the experience.

By directly managing the customer experience, operators now have the capability to:

- Turn existing customers into advocates for mobile data technology in general and the operator's offering in particular
- Acquire new high value subscribers to its mobile network
- Retain existing customers and encourage the use of additional services
- Increase ARPU

Maximising Operational Efficiency

Network Operations needs to be directed towards the area of most 'pain' for the operator and to the maximum benefit to the overall business.

CEM enables problems in particular areas of the network to be pinpointed. Threshold based alarms warn the operator of impending problems whilst historical archives of performance data allow rapid response to customer calls and fast closure of trouble tickets.

By guiding Optimisation engineers in their efforts to fine-tune the network, CEM also mitigates against problems occurring in the future, offering further efficiency improvements.

Enhancing Customer Care

A Paradigm Shift in Customer Care

As today's networks don't allow network operators to view the network and service performance as the customer sees it, it is not possible to take a fully pro-active approach to Customer Care.

Even if the operator is aware of a problem in the network, which may have had a negative impact on its customers, it is not until a user has logged a complaint about his or her poor user experience that the operator is made aware of the extent of the problem for this particular customer.

This leads to a re-active Customer Care process, a problem-oriented communication with customers and an unnecessarily high call volume to the Customer Care unit, with the subsequent high operational costs.



Picture 1. Re-active Customer Care

The ability to offer fine-grained customer care and accountability for service levels are extremely valuable tools in retaining existing customers and acquiring new customers. Using CEM, customer-affecting performance problems can be seen in real-time, allowing Customer Care to be pro-active in their interaction with customers, rather than re-active in waiting for a customer complaint. In doing so an operator will reinforce its strong commitment to customer care and build customer satisfaction and loyalty. This will also reduce the volume of incoming calls to the Customer Care unit, leading to increased customer satisfaction and lower operational cost.



Picture 2. Pro-active Customer Care enabled by Customer Experience Management

CEM focuses on helping operators meet their business goals by enabling them to monitor the service offered from the customer perspective, not just the network perspective.

This will facilitate improved product offerings to customers with *per customer* QoS guarantees. By enhancing the customer experience, the achievement of higher retention rates and differentiated product offerings, is now feasible.

Measuring and Building Customer Satisfaction

In today's highly competitive telecommunications landscape, increasing and maintaining a high level of customer satisfaction is of paramount importance to a mobile operator. A customer's over-all satisfaction with the service offering is influenced by a number of factors.



One main contributor to the satisfaction is the actual experience of using the mobile service, for example the speed of connecting to a data service. Today the view of the customer's satisfaction is mainly made up of a combination of the result of customer surveys and various network measurements. The output does not provide the granularity nor the exactness needed to build an accurate view and it does not provide the high-quality input needed by the operator's commercial and technical management.

CEM adds context to this data as it enables the satisfaction rates expressed by customers to be correlated with detailed usage statistics per customer, service and location. By extracting knowledge from the statistics, it provides the commercial and technical management with explanations to the reasons for the achieved customer satisfaction rates and information on where to focus the resources to improve satisfaction.

CEM allows Customer Care to adapt a pro-active approach, as described earlier, and contact the high value customer who experienced poor quality during a recent mobile service usage to inform them about what actions are being taken to compensate the customer for the poor experience and what actions are being taken to avoid this happening again. This level of customer-focus and rapid response will prove to the customer that he is indeed the operator's most valuable asset, which subsequently will build customer loyalty.

Building a Brand Experience

Managing the experience a customer has with a specific mobile brand has become increasingly important in keeping customers in the continued consolidation in the market.

The perception of the quality of an operator's services is a main contributor to this brand experience. CEM provides an operator with an invaluable supporting tool when building an experience brand.

This includes support to define what experience the customer will have with the mobile service offering, and support to ensure that this experience is delivered to the customer.

CEM allows the definitive customer experience to be measured in real-time and with high granularity and precision. This functionality will take the uncertainty out of the customer experience measuring process and bridge the information gap between the satisfaction rates expressed by customers and high-level network statistics.

Improving Network Quality

One important benefit of enhanced visibility of the customer's experience of the mobile network is that it will steer the network optimisation tasks to the areas that will improve the overall experience. It allows for rapid identification of problem areas in the network and expedites problem resolution.

This ability to continuously optimise the network and decrease mean time to problem resolution, leads to a network with a high QoS and ultimately to satisfied and loyal customers and greater product differentiation. In early GSM networks, a positive side effect of increased confidence in the quality of a mobile service being offered was the increased usage of that service.

In adopting CEM an operator can secure the success of their mobile services and revolutionise the way these services are managed and perceived by their customers.



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