The Data Usage-Customer Satisfaction Tug-of-War

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The ramifications of the telecommunications industry's evolution towards customer-driven, lifestyle services is now coming to a head for many communications service providers (CSPs). CSPs that are providing businesses and consumers with these advanced offers are facing a challenge on two fronts. The first is managing the more personalized nature of these lifestyle services, which might involve everything from network access, service definition and payment plans to the type of media and entertainment content involved. The second is managing the heavy burden these lifestyle services place on network capacity and the overall management of bandwidth.

The sheer volume of user transaction data generated by these services impacts the carrying capacity of many CSPs' networks—and their ability to keep customer satisfaction high and costs in check, while realizing an acceptable level of profitability. Consequently, today's traffic volumes (from both mobile and fixed-line networks) and the long-term implications are forcing operators to change their business strategies and take a step into the flexible world of policy-enabled customer satisfaction management.

The Tug-of-War Between Data Usage and Customer Satisfaction

It's no surprise that businesses and consumers want to pay as little as possible to get as many minutes of use, or as much bandwidth and download volume as they can—expecting total customer satisfaction. Meanwhile, operators would ideally like to capture the most revenue

to maximize profitability, while keeping their customers happy enough. CSPs want customers to stay and spend more, while they deliver as little network capacity as possible, to keep costs under control. Ultimately, as in all businesses, there needs to be a balance between the aspirations of customers and the business realities faced by all network operators.

To support increasing traffic volumes and provide network connectivity at an acceptable level of service quality, CSPs have three choices—build additional network capacity, push traffic to other operators' networks or manage their available

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assets more effectively. While the first two options are feasible and likely to be implemented in some parts of the world as a means for eliminating customer dissatisfaction, they come with additional costs and no guarantees of new revenues. That leaves the third option, managing available assets more effectively, as the most likely choice for many. CSPs are realizing that they need to engage in a customer-centric approach to policy control, to match end-users' bandwidth needs with the right

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business plan. Strategies incorporating a policy-based control function should recognize patterns of fluctuation in customer demand, and remember that not all businesses or consumers have the same needs and that these needs can change

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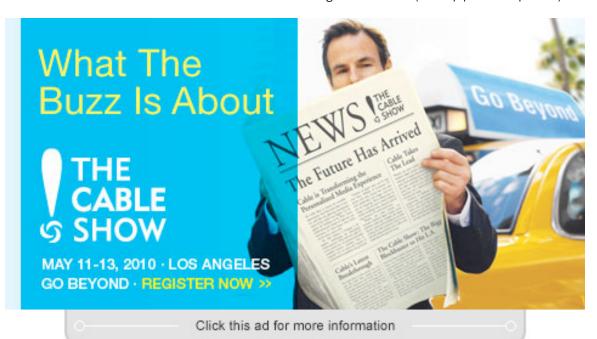
dynamically. Operators should also realize that the traditional way to influence customer behavior—through pricing plan and charging options—is not sufficient enough in today's dynamically changing market. CSPs' business strategies should also take customer quality of service expectations into consideration, which will vary by service type and bandwidth availability. They should also give customers the flexibility to define their service options and set the parameters around which their services will operate, such as time-of-day, day-of-week, credit constraints or balance levels. Lastly, they should bear in mind that enacting service usage and/or control restrictions without customer agreement can result in dissatisfaction—or worse—in the long haul.

Rising Hope with Policy-Based Customer Management

Greater attention to better bandwidth management is critical if CSPs are to keep customer satisfaction, resources and long-term business sustainability in check. It's also needed as the world becomes more connected—and traffic volumes increase several levels beyond what is used today. Meanwhile, shifting responsibility so that customers become more in control of their bandwidth consumption—whether through offering choices in how plans are priced or through usage limits—offers a viable alternative.

Effective, customer-focused policy management should involve three components: a customer usage identification (or deep packet inspection)

and data collection function, to understand what types of services customers are using; a policy definition and management function, to enable both operators and customers to customize how a pricing package is consumed or a service is accessed; and a policy enforcement function, to carry out defined policy rules. These functions work interactively, but many policy options cannot be implemented without a way to calculate user allocation limits tied to level of spend, download value or credit acceptability. An end-to-end, policy-enabled customer satisfaction management strategy can be fully realized when working collectively with a real-time rating and charging engine, to implement the price-based service options, such as dynamic bundles, defined spending limits and even advertising subsidization. Real-time charging was talked about three to four years ago as critical for operators' competitive differentiation. Today, bringing these components together to address customer-focused policy

requirements is largely new for the industry, but essential for meeting customer concerns and for addressing long-term business objectives. Real-time charging coupled with usage control, for example, is enabling CSPs to monetize certain network investments, such as service delivery platforms, through more attractive customer service offerings that involve content from multiple sources. Over the past two years, a small but growing number of CSPs from across the globe initiated business strategies involving policy management integrated with real-time rating and charging. Nearly all are now experiencing increased differentiation, more flexibility in their service offering capabilities and improved customer satisfaction—customers have more ways to match the service offerings with their own particular needs. It is evident that effective policy management, with customer satisfaction as the most important business objective, should be top-of-mind for CSPs worldwide.

Getting Things Right Requires Effort

To make a policy-based business strategy work, it takes a refocus on the way an operator conducts business—its systems, its processes and its work functions. CSPs need to ensure that traffic volumes do not affect network performance and users' quality of service, which might discourage them from future use. At the same time, they need to

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monetize new service offerings by providing customers with more personalized and responsive capabilities. To maximize revenue potential, the three policy management functions—policy definition, policy enforcement and usage discovery—must be integrated with a real-time rating and charging engine. In addition, CSPs will need to develop detailed steps that define what has to be done and in which order, to manage resources and deliver business value. The multiple workflow steps involving the order-to-cash, troubleshooting and bill payments processes, for example, will likely involve some level of change. Finally, policy management bridges the gap between business support (or IT) and network operations. Both groups must work closely together to create business value. Although this is easier said than done, it is especially important when it comes to interfacing the BSS with both IT databases and network nodes. The rapidly increasing level of customer usage data is proving to be a significant catalyst for operators' real-time business functions and policy-enabled customer satisfaction management. Personalization is the key to revenue growth; while subscribers are only prepared to pay for "vanilla"

services up to a certain level, they are willing to pay more for services that are customized to their needs and aspirations. It is clear that, if CSPs are to retain brand recognition and customer loyalty in the advanced communications marketplace, user choice and flexible pricing for lifestyle services must be the top priorities throughout all geographic areas.