

Bill Shock-A-Con: OSS/BSS Solutions Feel For You

By Becky Bracken

The FCC defines “bill shock” as, “a sudden, unexpected increase in a mobile bill from one month to the next.” But, for CSPs, bill shock is much worse—a consumer relations nightmare. There are many worst-case scenarios that seem to make for perfect slow-news-day headline fodder.

There’s Wayne Burdick who received a \$28,067.31 bill after he watched a Chicago Bears football game on his computer while on board a cruise ship docked at a U.S. port. His mobile broadband card had connected to the ship’s microcell rather than the local preferred tower. Furious about the bill, Burdick contacted the Chicago Sun-Times and the matter was dropped by the operator. Another bill shock cautionary tale involved a Florida woman who received a \$200,000 cell phone bill. Headline grabbers, indeed.

Each year, according to the FCC, the Consumer and Governmental Affairs Bureau of the FCC handles thousands of complaints on billing, poor service, and other problems affecting telephone and other communications services. Most of these cases involve unexpected roaming fees, data consumption and voice minute overages.

The FCC has identified six primary sources of bill shock for customer complaints:



- International roaming charges that consumers run up without realizing it and that can add up to thousands of dollars.
- Charges that accrue when consumers exceed the limits on their voice, text, or data plans, and begin accumulating high charges at a per-minute rate.
- Unexpected charges when a phone is used with Wi-Fi in “airplane mode.”
- Charges for mandatory data plans that are included with new phones and plans without the consumer being aware.
- Taxes and other fees of which a consumer was not aware.
- Confusion about promotional rates, plans, and billing—including unclear or inconsistent guidance from salespeople and customer service representatives.



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In May, the Consumer and Governmental Affairs Bureau of the FCC released a Public Notice exploring one possible set of remedies for bill shock. The European Union has mandated automatic alerts to let consumers know when they are approaching the limits of their text, voice, and data plans, and when they are about to incur roaming charges. The Public Notice asked whether there would be technological reasons that such a remedy could not be applied in the United States. Alerts could also help avoid other kinds of bill shock. For example, alerting a consumer who thinks he/she is using free Wi-Fi, but in actuality, racking up data charges.

“Last year, the FCC identified a growing problem, known as bill shock, and took important steps toward a solution, which led to today’s victory for more than 97 percent of wireless consumers,” FCC Chairman Julius Genachowski said in an announcement On October 17, 2011.. “These alerts will give consumers the information they need to save money on their monthly wireless bills. Consistent with the FCC’s ongoing efforts, these actions harness technology to empower consumers, and ensure consumers get a fair shake, not bill shock.”

The FCC, CTIA, and the international association for the wireless industry, agree that real-time SMS messages warning customers they are about to exceed their plan and will face higher fees are the solution to meeting new FCC bill shock standards.. This has presented a killer opportunity for OSS/BSS vendors to ride to the rescue. Seems easy enough – the question is why has it taken so long for CSPs to care enough to take action. It could be that they were more concerned about maintaining revenue fees from roaming and overage that they lost sight of how this impacted the customer experience and churn.

CTIA members agree measures must be taken quickly. By October 17, 2012, CTIA participating carriers will provide customers with at least two out of the four notifications for data, voice, text and international roaming. The remaining notification alerts will be completed by April 17, 2013.

“Whether mandated by government regulations or not, mobile operators around the globe must take measures sooner than later to keep up with the changing dynamic of the customer-centric mobile ecosystem,” Mary Clark, Senior Vice President, Roaming at Syniverse says. “Today’s subscribers are no longer looking for a provider to simply connect their devices. End users have become accustomed to a heightened level of always-on services, and they are unwilling to remain with an operator that only meets their basic needs – they are looking for a provider that exceeds service expectations and

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shows its dedication to their satisfaction. And these users are not afraid to leave if they are not receiving a level of service they believe could be offered elsewhere.”

Real-Time Intelligence

From an OSS/BSS perspective, the trick is capturing and generating real-time usage from the network and billing layers and delivering that to the customer before bill shock can happen. OSS/BSS solutions can help create a personalized, enhanced and transparent end-user experience. “For operators, the task of achieving this comes down to instantaneously capturing and analyzing subscriber experience data to ensure comfort and control while proactively resolving issues – what we refer to as the concept of Real-Time Intelligence, or RTI, Clark adds. One big reason bill shock occurs is because operators have only partial or extremely limited awareness of subscriber usage when roaming on a visited network. The visiting network generates call details and sends these records back to the home operator after the fact, which makes real-time roaming updates difficult. “The length of this process spans from a few hours to a few days or weeks, depending on which technology protocol is used,” Clark adds. “Regardless, the time lapse between the subscriber’s usage taking place and the home operator’s awareness of it contributes to the risk of bill shock.”

It gets more complicated in a post-paid model, which is prevalent in the U.S. Many operators haven’t aggregated and rated their subscribers’ usage in real-time in a post-paid environment. Rather, this process typically takes place at the end of the bill cycle at the end of the month.

Limited adoption of BSS systems also contribute to bill shock. Operators need systems that inform subscribers about the cost of using their services while roaming and enable a live, constant communication flow between the operator and the subscriber regarding their usage and the related costs.

“In our view, by tackling these three factors,

operators will be able to significantly reduce the risk of bill shock, with the added benefits of greatly lowering their level of uncollectable wholesale costs, empowering subscribers to confidently use services while protecting their brand.”

Roam if You Want To, Roam Around the World

Based on the millions of daily transactions Syniverse processes, as well as third-party data from Informa Telecoms & Media, Syniverse calculates there is a monthly average of 75 million unique outbound international roamers--subscribers traveling abroad with the potential to use mobile devices. Syniverse also found that more than 50 percent of those roamers do not use voice services and up to 70 percent do not use data services during their travels. One of the solutions within the Syniverse RTI suite, RoamMonitor, provides real-time rating and notification capabilities both to operators and their subscribers. This helps overcome the obstacle of delivering real-time notifications to individual subscribers when an operator offers a variety of pricing plans and allows operators and subscribers to define their own usage thresholds as well as the preferred notification mechanism.

CSP's Lift Their Game

“While this regulatory action primarily focuses on preventing bill shock, the tools that are required to fulfill the mandates also enable CSPs to lift their game by launching new business models, interacting with their customers in real-time, and providing a greater level of transparency and control to their customers,” Lucas Skoczowski, chief executive officer of Redknee, a bill shock solutions provider says. “Redknee is powering some of the world’s most innovative mobile operators, such as KPN’s Telfort, to provide their subscribers with an advanced customer experience and be compliant to similar regulatory mandates such as the EU data roaming notification and capping rules. At Redknee, we continue to invest in real-time monetization solutions to support the growth of mobile data and content for wireless subscribers around the world.”

The Sandvine Usage Management bill shock solution is integrated into the service provider’s home and roaming partner subscriber portal, subscriber communication, billing and OSS systems, and can differentiate between home subscribers roaming on a visited network and roaming partner subscribers roaming onto the service provider’s network. It also provides the appropriate communication, usage acceptance of further charges and usage details for billing. The Sandvine solution has been implemented by several carriers in the EU to meet existing

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bill shock real-time SMS text update standards; Telefonica is one of the largest.

“Telefonica’s focus on consumer quality of experience is key to their success,” said Dave Caputo, President and CEO, Sandvine. “Sandvine works closely with our customers to help them manage network demands and trends and identify opportunities to create and optimize new services. Our unmatched breadth of policy solutions, as illustrated by our numerous and varied Telefonica deployments, is a key competitive differentiator and one important driver of our future success.”

Essentially, bill shock prevention focuses on the fundamentals of quality customer service: flexible, real-time communications and empowered users. Investment in bill shock solutions is a de facto investment in consumer and public relations and happy customers.

“The best course of action an operator can take is to provide customers with control and transparency by delivering relevant, timely and proactive information about their usage to prevent the issue from arising at all,” Clark adds. “Further, they can empower subscribers to set their own thresholds and limits, helping them feel confident and fully in control of their usage.”