Are Mobile Operators Really Committed to Customers?

The answer may surprise you…
or maybe not

By Edward J. Finegold

Though customer churn sounds like a stomach ailment caused by dropped mobile calls, it's actually the greatest threat to any mobile operator's profitability. Given that it costs operators roughly $300 dollars to acquire each subscriber – and many months to recover that cost – it doesn't take an advanced degree in mathematics to understand why reducing churn is a top priority for operators worldwide. Combining this with their focus on selling data offerings to corporate customers, it's not surprising that mobile operators claim they are increasing their focus on guaranteeing QoS and improving the end-to-end customer experience.

Claiming to have lofty service management goals is easy. Achieving those goals is extremely difficult, especially considering that mobile operators typically focus on network technology and not at all on sharing information about what's happening from the customer's perspective. Operators are taking some small steps to build the some of the infrastructure they need to make a shift toward more customer-centric operations. But they still have fundamental problems that will undermine their efforts, and its not clear that they are truly committed to making things better for customers.

A Mobile SLA is Often an Empty Contract
The connection between new data offerings and customer churn is relatively simple, and is particularly evident in corporate offerings. "The large business customers have said 'we'll send our sales people out to run a trial,' but at the end they say 'nope, we're not confident you can manage our data services,' and then they leave for another carrier and take all of their voice revenue – as much as 95 percent of the whole – with them," says Kieran Moynihan, CTO of Watchmark-Comnitel, an OSS provider focused on improving service management for mobile operators. New data offerings, and the service management promises attached to them, have as much to do with retaining customers and their voice-driven dollars as they have to do with increasing services and revenue.

The key to winning data business is clearly an ability to offer something akin to what landline providers offer in the form of quality guarantees. Service level agreements (SLAs) have been in place in the landline world for several years and have become increasingly detailed to each customer account. For mobile operators, however, SLAs are a totally new concept and something they aren't eager to offer. "Most mobile operators don't want to offer SLAs because mobile is a best effort type of service, but with business data services SLAs are critical," says Justin Strong, product marketing manager for Agilent Technologies' service management product line, which is widely deployed among mobile operators, particularly in Europe.

Not only are mobile operators somewhat reluctant to roll out SLAs, they also aren't sure exactly what measurements to report or what levels of service they need to guarantee. "I don't think the mobile operators have figured out what to offer in their SLAs yet," says Paul Turner, vice president of product management for ADC Telecommunications' Metrica product line. ADC's Metrica NPR performance management product is installed in more than 210 network providers globally and is often part of the foundation upon which mobile operators' service assurance processes are built. "Part of the problem," he says, "is that this is not a connected world inside the mobile operators. The sales departments are selling SLAs, but the people responsible for managing them are not even involved in that process." If mobile operators are offering SLAs with virtually nothing behind them, their motives become highly suspect. It would seem to be more about telling the customer what they want hear than offering improved services for the right reasons.

An SLA cannot just be a piece of paper that offers a rebate when things go wrong on the network. "Corporate customers are not interested in refunds," says Oliver Schmidtke, mobile wireless market development manager for Concord Communications. "They want a good 3G service that let's the user perform his or her job up to par without worrying about connection speed or service reliability," he says. Further, a real SLA could be a true differentiator for the mobile operator that invests in delivering it. "I think the first mobile wireless carrier that can guarantee a certain level of service – not necessarily three nines, but 75 or 80 percent reliability – will take away a huge chunk of market share from its competitors," says Schmidtke. It's not clear, however, that operators understand this vision yet.

Beyond the SLA
To truly improve service quality and the customer experience, a mobile operator needs to know what that experience is like, but too often they haven't a clue. Traditionally, network operations led the way and other groups – like corporate account managers and call center reps – had no visibility into the network domain. "In the large European carriers, a typical care organization will have 10,000 people, but they had zero visibility into the network," says Watchmark-Comnitel's Moynihan. This problem is rampant in all mobile operators worldwide, and it explains why subscribers experience long hold times and tedious trouble shooting scripts that have nothing to do with the problem they want solved.

For a mobile operator to know not only what's happened to a customer, but share that information across the organization is an enormous undertaking. It's tough for an operator coming out of a recession to tackle all at once. It involves integrating an enormous number of OSSs that don't typically communicate, adding new systems to take advantage of this integration, and changing organizational structures to put the resulting information to good use.

The OSS Challenge Is Steep, but Necessary
Starting at the network, two sets of measurements must be derived. First probes, automated testing systems and related applications must be in place – and often they are – that can capture data regarding network performance; connection and call quality; availability; and service delivery from both the RF network and backhaul circuits that

typically involve IP running over ATM. These measurements can provide a generic view of overall network performance, but they don't necessarily point to a specific customers' experience. To achieve ideal visibility will require some kind of management agent on the handset itself. "We are doing research into agents on handsets…we'll be in trials very soon where we'll be doing that sort of thing," says Agilent's Strong. Trials are a first step, but Strong agrees that it will be several years before handset agents enter production on any kind of a broad scale. In the meantime, some performance management applications do have an ability to monitor specific customer connections and service instances, and these are also in the early stages of deployment.

Tying Network Data to Services
Once this data is collected, it must be scrubbed, prioritized and integrated with other information that relates it to services. Service data may be located in any number of disparate billing, provisioning, network inventory and network configuration databases. Synchronizing these databases and maintaining their accuracy is a problem common to every major mobile operator in the United States, and most operators around the world. Integrating these systems and databases will require a significant integration program that will cost millions, will likely require more than a year for any operator to complete and is highly likely to fail if not managed effectively. For a risk wary executive, taking on this kind of massive program can be a frightening prospect without a rapid path to ROI.

Making the Customer Connection
If the connection between network events and active services can be made, the next step is to tie that information to customers and deliver it to the people who need it. Generally, billing plays a significant role here because "subscriber data that usually ends up at the door of a billing system in CDRs and IPDRs is now a fundamental component of service management," says ADC's Turner. Of course, exposing a billing system or process to external integration adds a whole new level of risk to the equation. Circuit inventory can also be a hinge point between services and customers, but few carriers have enough data consistency among systems to tie a specific circuit identifier in one system to a customer identifier in another.

Presenting Relevant Information to the Right People
Delivering information to the right people can mean anything from creating a detailed web front-end or integrating with CRM applications to installing a whole new application designed to display common information to different groups in relevant ways. Defining what's relevant and what to display is essentially a matter of careful requirements gathering conducted within and among each group. Most service assurance vendors are rolling out dashboard interfaces that can display this information to people in an accessible and flexible way if deployed properly.

What About Service Fulfillment?
All of the activities mentioned thus far only cover network service assurance and CRM. Part of the overall customer experience includes everything from service ordering and provisioning to billing. "I've been involved in a service management survey with operators," says Strong, "and the problems that occur the most are the ones that fault and performance management systems can't detect." The top three problems Agilent's survey identified, according to Strong, involved network configuration, handset

configuration, and provisioning issues. Any of these can have a direct impact on a customer's experience, particularly with new services. If a subscriber can't access a service because a handset is configured wrong or the backhaul network can't support the request, it will result in a failure that's simply unacceptable and a lengthy and costly call to the care center.

People hate to change
Even if the technological hurdles are overcome, there are still people to consider. "There's a lot of internal reorganization necessary to get to this mode of customer-centricity," says Moynihan. People resist change, and change creates political struggles that can undermine even the best architectural and project plans. Sharing information means people working inside operators will be looking over each others' shoulders, and that can lead to fear and conflict. Further, it's not simple to retrain people for inter-group communication who are accustomed to working in a defined silo. Anyone that has ever worked as a salesperson or consultant inside a major carrier understands that when people feel vulnerable, they'll do what they must to sandbag projects and protect their fiefdoms. If their jobs do not depend on demonstrating change and improving the way the business operates, they'll have no reason to comply with management's decisions to integrate and re-organize around the customer.

What Operators are and aren't Doing Today
A few operators, including AT&T Wireless, Orange and Vodafone Ireland have installed basic service management systems successfully from Watchmark-Comnitel, ADC and an Agilent partner, respectively. Many others have issued RFIs or RFPs for systems that will provide some of the infrastructure for customer-centric service management. According to ADC's Turner, operators are retooling their performance management systems to derive data that is more relevant to the customer experience than the network-centric data collected today. "They've done this performance management refresh so they can move to service management next year," says Turner. "They're not yet implementing service management on a wide scale, though they are all talking about it," he says.

Another concept mobile operators appear to embrace is that of the service operations center (SOC). "The SOC looks after the service pipe and the revenue it generates," explains Concord's Schmidtke. The SOC tries to determine not only which network events affect the most customers, but also the most revenue. From there, the operator can devote resources to fixing the most costly problems first. Generally this means corporate customers will receive priority service, but an operator cannot be faulted for caring for its biggest customers first. All of the experts interviewed for this story also agreed that new data users – including teens who are driving download traffic – are important to operators that want to make sure they receive their downloads in a timely fashion so they'll continue to come back for more.

It's important to note that just because an operator claims to have a SOC today does not mean it has all of the visibility into the customer experience it really needs. If an operator will sell an empty SLA, it can just as easily change the 'N' in NOC to an 'S'. In the end, the SOC may still focus on the network, but require more emails and phone calls to people on the customer-facing side of the organization to follow up on what the NOC

discovers. It's a decent first step, but ultimately a temporary solution that won't meet corporate customers' real needs.

How bad data threatens it all
For all of the money and time a carrier can spend on integrating applications and changing organizational practices, some fundamental problems can stop them from coming anywhere near achieving effective customer experience and service management. Every mobile operator – whether it or its vendors will admit to it publicly or not – has some kind of data integrity problem relating to its network. As Agilent's survey found, provisioning and network configuration issues are the source of a large number of negative customer experiences.

The problem is simple – if the operator doesn't have accurate data about its network, it can't deliver effective service management. The problems bad data causes include dangling circuits; circuits with too little capacity to support data services; erroneous provisioning policies; failover circuits and policies that don't work; provisioning platforms that cannot scale to volume; provisioning databases that do no resemble the actual network in any way; inaccurate inventory databases that are meant to be the center of customer impact analysis solutions; and a range of other problems. "What's most difficult conceptually for operators to understand is that without an accurate, integrated, correlated information model, there's no way to know the effects of a network problem until experts sift through the noise of thousands of network alarms. If I'm a carrier, I first want to ask of any vendor – or of my own people – 'how are you doing event management?' If you're trying to do correlation off of databases – and not in real time - that's just a post-mortem exam," says Dan Coffey, president and CEO of NetHarmonix, a developer of real-time network discovery, capacity management and activation solutions.

The more sophisticated service management applications available in the market depend on network database accuracy to deliver on their potential. In the end, one standard IT axiom stands above all: garbage in, garbage out. OSS vendors are delivering solid solutions, but they'll be installed on a weak data foundation that will undermine their effectiveness. In the end, vendors may take the blame yet again for operators that choose to do the job half-way. If operators don't clean up their data problems and commit to real service management, their large corporate customers shouldn't take their promises seriously. "There's only one version of the truth," says Moynihan, "and it's what the customers are experiencing." If the customer experience is poor on all fronts, operators will lose what little credibility they still have.

Do it Right for the Right Reasons
Ultimately, improving service management and the customer experience can't be just for show. Empty SLAs, NOCs renamed SOCs, and millions spent on new technology won't take care of customers and their specific needs. If operators are solely focused on reducing churn, increasing ARPU, and telling customers what they want to hear to increase quarterly profits, then they're overlooking the real goal. That goal should be to do things better in order to be effective communications partners for their customers.

Global corporations won't be conned into buying empty promises. As the saying goes, you can't hustle a hustler. They will, as Moynihan stated, make operators offer trials before they invest. This sort of thing has happened before in the United States. For those that remember how miserably CDPD failed, it's a prime historical example. In that case, a lack of commitment to a promised data technology - in lieu of maximizing voice revenue for the short term - turned away giant customers that now lead the world in mobile data usage without the help of its largest mobile operators. If the fact that both Cingular and Nextel failed to comment for this story is any sign of mobile operators' real commitment to the customer experience, then clearly they have a lot to learn about both communication and partnership. When it comes to mobile data services, the message for corporations is as clear as it is ancient: Caveat Emptor - buyer beware.