

WHEN SMS GOES DOWN, WHO DO THEY CALL? ANSWER: HERMAN NG

An Interview with Keynote's Herman Ng, Mobile Solutions Consultant

When I send a text, it just works. Right? Well, a lot of people are waking up to the reality that the answer is not what you think. SMS or texting is a great mobile app and it's being used in all sorts of ways such as mobile banking transfers, security notification, and account setup. If SMS doesn't work the whole application is compromised. So when executives at VeriSign's Messaging and Mobile Media Division boast 99.97% average uptime, you know it's something pretty important to the competitive landscape.

Benchmark recently caught up with Herman Ng, [Keynote](#) mobile solutions consultant. He has worked with many leading Web and mobile businesses to set up performance monitoring practices and to diagnose faults and minimize downtime when something goes wrong.

Benchmark: What do you do in a typical day?

Herman Ng: There's no such thing as a typical day. Most of the time, SMS works just fine, but when something goes wrong, the content provider is the first to take the heat. As commercial applications of SMS increase, so does the need for proactive monitoring of SMS activity. Each day brings its own opportunities because SMS is used in so many different ways. I recently worked with a bank that presented an interesting use case.

When a customer wants to use a mobile device to initiate a payment or funds transfer by SMS from a mobile device, three things have to happen:

- He or she receives a callback from our customer's Interactive Voice Response (IVR) system that indicates the payment request was received.
- IVR asks the user enter a PIN to verify identity and confirm the transaction.
- If the callback is not received, the user has to dial an 800 number and try to complete the payment.

If the confirmation attempts fail, you have a very unhappy user, worried about where his or her money went. I helped create a script that not only monitored the transactions but also pinpointed the failure to the IVR or the carrier if something went wrong.

Benchmark: Are banks primarily using your monitoring service?

Herman Ng: No, it's for companies that want to protect their image and increase their customer base. A great example is social networking. Social networking sites are very interested in a great mobile experience and their customers need the ability to open a new account from a device. Filling out the registration form is a lengthy process, so users only want to enter it once. While the confirmation vehicle is SMS, there needs to be tight integration between the WAP and SMS components to make sure that transactions are completed.

I helped a social networking customer create a monitor for both WAP and SMS to ensure they are working as expected. When a new account registration is sent to the customer's site, an SMS containing a confirmation code is sent to the mobile number the user submitted. The user enters this confirmation code back on the page to complete the transaction. We use 24x7 monitoring to keep track of how well these transactions are performing because when the process isn't working right, a large number of customers simply give up or switch to another service.

Benchmark: Do you do any proactive monitoring?

Herman Ng: While we offer automated portal alarm alerts, I also keep an eye on each account. If something is going seriously wrong, we want them to know right away – not at the end of the week or the end of the month in a static report. Our data often reduces troubleshooting time and gets our customers back up to full performance more quickly.

Benchmark: These are cool applications, but isn't this kind of work fairly intuitive? Can't the site developers manage this themselves?

Herman Ng: Theoretically they can, but when you consider the resources that go into what we do, you may want to think twice. Third-party monitoring programs are popular because they work and they're cost-effective. I'd even argue that what you get is much better.

Benchmark: How is hosted SMS monitoring better?

Herman Ng: I see three major areas where we provide a distinct value-add: user perspective, big picture, and the increasing popularity of complex transactions.

User Perspective: A good third-party program will perform regular monitoring using the types of devices that your users favor, from various locations, and over the carrier networks of your end users. This often yields totally different results from what an in-house monitoring program can see, and will alert you to deteriorating conditions as seen by the user much more quickly – before your Customer Service lines start ringing.

Big Picture: We're monitoring your SMS applications along with numerous others giving us additional perspective that let's us see issues sooner. Only a third-party facility can spot trends, such as a slowdown over multiple SMS transactions on a single aggregator or a widespread carrier outage in a specific part of the country, and supply that information proactively to its customers.

Complex Transactions: Companies are integrating SMS with e-mail, IVRs, WAP, the Internet and other communication platforms. This complexity creates additional opportunities for a transaction to fail. Combined services can involve WAP logins, sending SMS payments, and receiving SMS confirmations. We have the expertise and experience in scripting and debugging all of these transactions. A heads up from your monitoring organization on the likely source of the problem can save many hours of debugging user complaints.

Benchmark: It looks as if there is a lot more than one might expect. Any last thoughts you want to leave with us?

Herman Ng: In-house monitoring is not always the best practice and you can't depend on your SMS partners to quickly let you know when a problem occurs. Your users are going to hold you, not one of them accountable. While we recommend a hosted solution, doing nothing at all is the worst option.