

SNAPin Changes the Mobile Support Equation

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1 Introduction

SNAPin Software Inc., a mobile developer in Bellevue, Washington, is looking to change the mobile support equation. Its SelfService product suite “could have the same effect on the mobile industry as the ATM had on banking,” declares Robert Lewis, the company’s CEO. He is serious. Counting product pilot tests either completed or in the pipeline, Lewis says SNAPin could soon have 200 million users worldwide.

SNAPin’s SelfService suite promises to substantially reduce the volume of calls pouring into operators’ support lines by offering automated self-service directly on consumers’ mobile phones.

Demand for SNAPin’s software is being driven by the rising cost of mobile customer service. For most operators, the revenue equation is straightforward: More subscribers equal more revenue. But with each new subscriber also comes an increase in the operator’s customer service costs. In fact, as many as half of all mobile subscribers call their operators for support each month, according to Lewis. At a cost of \$4 to \$6 a minute, that kind of customer support gets expensive quickly. Worse, this cost is growing faster than the subscriber base itself, in part because today’s increasingly sophisticated smartphones require higher levels of support than do basic, entry-level phones.

That is where SNAPin Software comes in. The company was founded in 2003 by Brian Roundtree, today SNAPin’s chief technical officer (CTO). Initially, Roundtree created a self-supporting e-mail client for the Symbian OS platform. Later, he enhanced the software with a self-support capability. Roundtree says he knew he was on to a good thing when he showed the suite to operators. “Their eyes lit up,” he says.

That early self-support capability later became the core of SNAPin's SelfService suite. Today the suite promises to shift the burden of support away from operators and onto the consumer by adding intelligence to mobile phones. If operators can shift a chunk of the routine service calls to automated self-service, they stand to reduce their costs substantially. In fact, SNAPin estimates that an operator with 10 million subscribers could save \$400 million over the course of three years by using the SelfService suite.

SNAPin can also help operators boost revenue. After Roundtree and his colleagues discovered that most mobile consumers barely take advantage of the capabilities of their phones, they added a SelfService Guide that provides interactive, context-sensitive assistance right on the phone. This drives usage of advanced phone features, thereby generating incremental revenue for operators. "Teenagers have a high adoption rate of advanced features, because they teach each other," says Roundtree. "We're like the teenager's friend who teaches them to use the phone."

2 The SelfService product suite

SNAPin's SelfService suite runs on the consumer's phone and consists of four components:

- SelfService Guide: Displays interactive promotions and context-sensitive training.
- SelfService Care: Proactively intercepts calls made to customer support and resolves most problems right on the device.
- Diagnostics: Automatically detects and repairs problems, particularly issues related to device configuration and network settings. Also offers real-time remote diagnostics.
- Metrics: Helps operators improve service and understand their markets by gathering and reporting data on device and network usage.

SNAPin SelfService is proactive and automated; that is, it reacts to the consumer's activity on the mobile phone. For example, the suite can monitor e-mail usage, check settings, and either automatically reset to the correct settings or reprovision the device. "We use the power built into the phone to see what's wrong and fix it automatically," says Roundtree. "The system performs all the steps."



SNAPin proactively identifies and corrects a problem

3 The business model

SNAPin charges operators a one-time license fee for SelfService; it is effective for the life of the device. The company also charges operators a small maintenance fee. The SelfService suite is then loaded onto each device before it is sold to a consumer.

Savings can come quickly, according to SNAPin. “Eliminating just one customer-support call will pay for the cost of the software,” Lewis says.

Another benefit: SNAPin offers operators a predictable customer-support cost. This lets an operator scale without making a corresponding increase in its support costs.

SNAPin also gives operators the ability to use the SelfService software to promote revenue-generating activities. Operators can use SelfService Guide to encourage the use of features that boost network traffic. For example, if the SelfService suite detects use of the phone’s camera, the software can suggest that the consumer try picture messaging. It can then walk the consumer through a multimedia message step-by-step.

4 The technology

SNAPin’s SelfService is a client/server application; the client resides on each mobile device, while the server resides on an operator’s computers to deliver end-to-end support. The client software consists of a core application, user interface, and interface to the specific device. This allows operators to provide the same SelfService functions across multiple devices. “The application acts like a Symbian application on a Symbian phone,” says Roundtree (though SelfService also supports other operating systems and devices).

The SelfService application was written in C++ because “the application needs to access things inside the phone,” Roundtree explains. The core application takes up about 300 KB of memory, or about the same amount of memory as a typical Java™ game, Roundtree adds.

SNAPin is now adapting the SelfService suite for S60 3rd Edition devices, and it is turning to Forum Nokia for help. “Forum Nokia has been very helpful in providing information about the new Symbian OS platform,” says Roundtree.

5 The user experience

From a consumer perspective, SNAPin’s SelfService suite is essentially transparent. For example, by dialing 611 for operator support, the consumer will get a message that says to look at the phone display. There the consumer will see a list of common support requests. After the consumer clicks the request that matches the issue, the SNAPin software takes over. “The customer won’t see us, but they will see interactions they never had before,” says Roundtree.

That is not to say the consumer must relinquish all control. On the contrary, the consumer can opt out at any time and go directly to a service rep, Roundtree explains. In fact, if the SNAPin software cannot fix a problem, it automatically dials the operator’s customer-support desk — and gets immediately routed to a higher level of support than the consumer would receive by dialing support him or herself. When this happens, the SNAPin software also automatically transfers all relevant information to the higher-level support person.

6 Future expectations

SNAPin is poised to take off. British operator BT Mobile has successfully completed a commercial test of the SNAPin software's ability to intercept and resolve calls made to customer support and deliver real-time OTA (over-the-air) remote troubleshooting. Another trial, this one conducted by operator Orange, is testing SNAPin's software on two fronts: how well it spurs consumers to adopt new services, and whether they can effectively self-diagnose issues relating to their mobile devices and personal accounts. In addition, SNAPin has completed several other field trials with mobile operators. It now expects to have the SelfService suite commercially deployed at multiple mobile operators by the end of 2006.

If SNAPin SelfService comes close to doing for mobile devices what the ATM did for retail teller staffing, SNAPin's future looks bright. But why stop there? More and more products have built-in intelligence that could be used to reduce customer support costs. And SelfService may very well change their equations, too.

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