

MOBILE ENTERPRISE

CONNECTING WIRELESS SOLUTIONS TO BUSINESS STRATEGY

AUGUST 2006 | AN EDGELL PUBLICATION

INSIDE
Industry Expert
Andrew Seybold on
Putting 3G to Work

Powerful Solutions
for Utility Companies

Real Time, Real Cheap, Real Smart

Hosted GPS
tracking is giving
small shippers
the edge





>> George Wessin, founder of Wessin Transport (left) and Alan Schostag, manager of information systems.

The In-Transit Authority

With the help of a small applications developer, Minnesota shipper Wessin Transport rolled out a mobile solution that's enabling it to pinpoint package locations—and rival even the industry's biggest players.

Managers and drivers at Wessin Transport are happy trumping the competition these days. Each workday a fleet of shiny, white Wessin trucks delivers 15,000 to 30,000 parcels to businesses, post offices and homes throughout the Midwest and Northeast. From loading dock to customer doorstep, the packages are tracked invisibly through a skein of wireless-

to-Web connections. Wessin drivers carry Nextel/Motorola i355 handsets, each of which is equipped with a tiny scanner, GPS antenna and AirClic JAVA-enabled mobile

application that lets them scan each package's bar code and provide management and clients with proof of delivery and an exact location of package drop-off. Track and trace status, along with a GPS map, pinpoint each package location online.

Wessin is thought to be first among private regional transport companies in America to implement an inexpensive mobile locator technology that rivals the accuracy of bigger competitors—including the multi-billion dollar proprietary systems of FedEx and UPS.

"Before September 2005, we weren't able to provide our clients with track and trace capability. It was our word against theirs when packages got lost," says Alan Schostag, Wessin Transport's manager of information systems, who helped spearhead the effort. "Today, customers can go right onto the system to find out exactly where their packages are. The system is getting us more contracts because our integrity is higher. The client is able to track shipments, which saves them on shipping out duplicate orders."

Wessin ships 3 million packages a year for its primary client, Access Business Group (ABG), a large contract manufacturer and distributor of Quixtar cosmetic and agricultural prod-

ucts. Today, ABG is reporting fewer duplicate orders, happier customers and savings on lost packages. According to Jim VanderMeer, transportation manager for ABG, "Quixtar customer service folks are thrilled with tracking and tracing because they've found that people who have a package tracked are much less likely to get a package replaced... and the new mobile technology makes tracking and tracing much more viable for a small regional carrier.

Because ABG uses private carriers, such as Wessin, it uses cycle delivery, which means that it ships to one zip code only once a week. Wessin is the largest carrier to avail itself of the U.S. Post Office's Destination Delivery Unit program, which allows transport companies to deliver packages in bulk to any of 44,000 post offices around the country and to receive discounts and guaranteed same-day or next-day delivery.

"This [strategy] allows us to consolidate and gain huge advantages from a cost and service standpoint, and having a regional carrier like Wessin enables next-day delivery for over 80 percent of the packages shipped and 48 hours for the rest," says VanderMeer.

ABG does not disclose an exact or estimated amount of cost savings due to the new mobile tracking and tracing

technology. However, VanderMeer explains, "We knew we'd have a gain in soft savings as well as hard dollars [because] we're replacing less packages because they're trackable."

Delivering Benefits

In 1972, George Wessin and a friend bought a used farm truck and ran an ad in the local newspaper advertising that they would "haul anything." Since then, Wessin has been growing the company and improving its business model, and today it has 17 offices nationwide.

Wessin's embrace of mobile technology is allowing drivers to accomplish something that not even FedEx or UPS can claim at this point—GPS location and proof-of-delivery simultaneously. This is made available through an ordinary Java-capable wireless handset.

"The customers demanded that their vendors use this kind of system," says Wessin. "We wanted to offer a proof-of-delivery system as good or better than UPS or FedEx." The company

"We deliver proof of delivery, time management, inventory accounting and tracking for the masses."

has spent \$150,000 in start-up and implementation costs, paying a service fee for AirClic's hosted track and tracing Web services to the tune of \$30 to \$60 a month per driver, on more than 100 Nextel handsets.

AirClic's mobile locator system is part of a movement to commercialize cheap and high-utility GPS chipsets. The target for AirClic and other mobile developers is primarily small-to-medium size businesses lacking the resources to implement proprietary solutions.

In the case of Wessin Transport, "We deliver proof of delivery, time

management, inventory accounting and tracking for the masses,” says Tim Bradley, CEO of AirClic, the Pennsylvania-based mobile business process company that specializes in automating corporate workflows. “We



>> Wessin's Schostag with AirClic CEO Tim Bradley.

do GPS as part of our solution, and we've worked with Wessin to optimize tracking and locator controls for the entire trucking fleet.” Backend integration with enterprise resource planning (ERP) and other corporate systems are also part of the solution.

Founded in 2000, AirClic cut its teeth on mobile handset specimen tracking for Minnesota's Mayo Clinic. The clinic required very efficient mobile locator services as well as proof of delivery for its perishable tissue specimens sent around the country for testing and clinical use. AirClic, which now has 500 customers worldwide, developed a mobile tracking/logistics and security system that integrates directly with Mayo's lab management ERP systems.

Although the Mayo Clinic was one of the earliest mobile adopters, AirClic has extended proof-of-delivery and GPS tracking to many different industries. “We currently have Mayo tracking specimens, Wessin tracking packages and Disney tracking cast members,” says Bradley.

The company's flagship product is the

very customizable AirClic MP (Mobile Process) platform, the result of a \$20 million development program. “We work in an on-demand environment with full hosting facilities,” Bradley explains. Because of the modular mobile platform, developers can integrate GPS and JAVA-based apps to corporate backends with comparative ease. “Our application development time for a

new solution has shrunk from six to nine months to two to four weeks,” says Bradley. Since AirClic data solutions are based on host servers that connect to the Web, clients can outline their workflows and quickly obtain a new mobile application using the AirClic MP platform and ruggedized hardware of their choice.

A Slow Awakening

In the mobile business and locator automation space, 30 to 40 small applications developers now compete, according to Allyn Hall, director of wireless research at the Scottsdale, Ariz.-based research firm Cahners-Instat. “Nextel has been playing in this space for several years with GPS,” Hall said, “but the factor [that will stimulate growth] is handset availability [industry-wide].” Before this year, “operators wouldn't open their handsets to applications developers,” says Hall. “In the case of GSM operators, such as T-Mobile and Cingular, accuracy issues and time delay of location technology was far less accurate than any GPS-based system in cell phones. Now, though, Cingular has a couple of Assisted GPS (A-GPS) phones using a combination of base station locality and GPS, and it's much quicker and easier on battery life than using GPS on standalone devices.”

Mobile locator services are beginning to touch consumers and business. For example, “Sprint and Verizon now have wireless child tracking, and Cingular has decided to provide A-GPS instead of time-delay phones, which were accurate enough for E-911 locator requirements but not for

practical commercial applications like package delivery,” Hall continues. Software collaborators now include heavy hitters such as Microsoft and NAVTEQ. “These are pretty serious people, but unfortunately research was focused more on consumers than business, so business apps are a little behind.”

Package and inventory tracking are ideally suited to the cell phone, Hall continues. Dispatch, maps, navigation, routing, field workforce management, asset tracking and mobile security tracking (i.e., tracking security guards), among other services, are also well-suited, although some existing “black box” technologies such as On-Star's in-vehicle devices don't require porting to a cell phone. “Growth will be very much dependent on mobile applications that really meet business needs, handset availability and carrier pricing and packaging,” Hall concludes. “If mobile applications are expensive, that will dampen growth.”

AirClic, in particular, accents affordability. A ruggedized Nextel handset equipped with a scanner and protective cover now cost around \$300 per unit. Hosted Web services are especially valuable to small and midsize companies that want a “complete package” without the headaches of tracking assets in-house.

“If you think about the billions UPS and FedEx spent building their proprietary package tracking solutions—for companies like Wessin Transport, the idea simply isn't practical,” says Bradley. Although Wessin initially developed a GPS-based scanning/tracking solution with another software developer, the equipment and the application become quickly obsolete.

“The other company offered mobile scanning only as a side solution,” says Wessin's Schostag. “The manufacturer stopped making the scanning equipment, so we partnered with AirClic to develop scanners that fit onto select Nextel cell phones.”

Schostag and Bradley collaborated on a mobile process that would let customers

not only verify package location on the Web but also marry the data with real-time GPS maps and verification against original shipment manifests. Wessin scans packages at two points in the delivery circuit, both as packages are loaded onto trucks at Wessin shipping stations and then at the recipient's doorstep or the post office of delivery.

"The system will show you a map of where your barcode was scanned," Schostag explains, "and with the Web portal AirClic set up, you log in and see all the packages scanned by your drivers. Click on any one of the package IDs and the system brings up the location." Once the package is scanned, GPS verifies the location and scripts are run, which pull the

AirClic MP uses a modular, four-point process to customize mobile applications like Wessin's. The Java-enabled platform first performs data capture of actions, assets, conditions, events and GPS information and then pumps the data to AirClic servers, which aggregate the information in real time and make it available on-demand through the Web portal. Clients can monitor field activity in real time using standard reports or ad-hoc queries to re-deploy assets as needed. Finally, the AirClic MP Harvester pulls the data to feed back-end systems such as time and asset management, billing, CRM, SCM, GL, ERP and payroll.

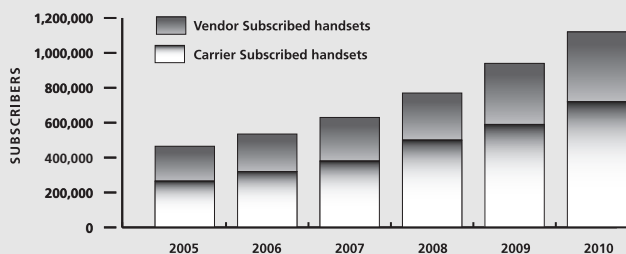
Companies such as FedEx today do not have mobile GPS as part of their package

There's no telling whether the big guys will respond in kind. But it could happen, Hall says. Already, AirClic is planning to enhance its GPS capability, adding Mobile Exchange, which will push information from the backend out to drivers' mobile phones to update them on their next job, or channel an end-user query. AirClic further plans to diversify into executive mobile push applications, adding such features as mobile RFID, biometrics and infrared scanning in the near future.

Meanwhile, ABG's VanderMeer is delighted with the possibilities. "In the future, our goal is to make all our carriers' delivery services track and traceable," he says. "We want to maintain private carriers long-term, and to be competitive long-term

A recent survey by Cahners-Instat of carriers and application providers indicates that by the end of 2005, an estimated 500,000 GPS-enabled cell phones were deployed with locator applications, approximately 300,000 of them carrier-built and 200,000 vendor-built. "We're forecasting that the numbers [for enterprise applications] will double in the next five years, though it could easily grow more than that if applications are there and prove their value," said Allyn Hall, director of wireless research at Cahners-Instat.

CARRIER VS. VENDOR SUBSCRIBED ENTERPRISE LOCATION-ENABLED APPLICATIONS (Aggressive Forecast) 2005-2010 Source: In-Stat



data wirelessly to the AirClic server. Wessin developed a software that then takes the data from AirClic and makes it easier for clients to look at on the Web.

The AirClic technology has enabled Wessin to move from end of the day updates to real-time updates, with data refreshes every two minutes. GPS technology will soon be extended to track vehicle location within the delivery route and leverage electronic "bread crumbing" to pinpoint the exact location and status of each delivery.

delivery or tracking solution, notes Cahners In-Stat Analyst Allyn Hall. "They don't have a GPS mapping/navigation system in their vehicles because their drivers know where they are," he says. Instead, these companies put a scanning device on a transmitter that sends package barcode information automatically to a central system. "They don't use GPS applications at all," says Hall. If smaller regional carriers can prove they have more accurate package locator services and do the job better, faster and cheaper than other carriers, they'll steal business.

we need to offer Quixtar the value it requires to prove that private carriers' on-time service numbers are based on actuals and not on how many customers call in and complain." By adding GPS-enabled mobile track and trace, there's efficiency the carriers are gaining on time services, he adds. "For us, it's a great opportunity to show how our carriers are performing." //

Arielle Emmett is the author of *Wireless Data for the Enterprise: Making Sense of Wireless Business*.



AirClic, Inc.
411 South State Street
Newtown, PA 18940
tel +1 866-247-2542
information@airclic.com
www.airclic.com