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U.S. mail stops for nothing... unless an airliner can’t comply

CASE STUDY

DBK delivers a data-collection solution that keeps the mail flying fast while making sure one airliner fulfills its multi-million-dollar contract with the U.S. Postal Service.
Background

For years, the U.S. mail has taken a back seat on commercial and cargo airliners. Carriers that flew the mail between cities for the United States Postal Service often loaded bundles of mail with little or no timely tracking information. Consequently, some mail was left behind while being reported as shipped, and mail was being delivered too late.

So in 2003, the Postal Service drafted stringent new requirements for airlines hauling the mail. To cash in on the $370 million paid out to carriers for mail transport service that year, airlines had to prove they were delivering mail on time and meeting other service level agreements.

Solution

To do this, the Postal Service required that airlines report all mail being carried on individual flights and provide timely and accurate status reports about mail delivery. Financial penalties would be incurred against airlines for inaccuracies or delays.

Using handheld devices, airline employees would have to scan bar codes affixed to some individual pieces of mail, as well as every mail bag. These scans would indicate when and where mail was received by the airline, when it was placed aboard the planes and when it was delivered to the post office at its destination. This bar code data then would be uploaded to the Postal Service, giving it the information to evaluate each carrier’s performance.

One airline turned to DBK Concepts for help, citing the company’s expertise in delivering mobile data-collection systems. The airline and DBK agreed on the project’s scope and specifications in June, which created a significant time crunch, because the Postal Service required that all airlines be in compliance with its new data-gathering model by late September.

“The requirements were considered undoable by many in the industry,” said Danny Katz, DBK Chief Executive Officer. “We even heard that one airliner decided to get out of the mail business because of the guidelines. But our client was determined to fulfill its multi-million-dollar contract with the Postal Service.”

DBK devised a powerful end-to-end solution that transmits data from wireless handheld computers over a wide area network every two minutes. DBK serves as the application service provider (ASP) and gathers the information at its Miami data center. The aggregated data is then formatted and uploaded to the Postal Service every five minutes.

About 650 handheld devices were installed at the airline’s 96 locations around the country. DBK chose the Intermec 760 color mobile computer running on the Microsoft PocketPC 2002 operating system. The device offers a built-in bar code scanner, as well as the option of connecting a Metrologic Instruments hands-free scanner, which was used in this project.

“Employees picking up heavy mail bags and totes have the freedom to simultaneously scan items with a scanner located on the back of their hand, while moving these bags and totes,” Katz said.

DBK built a special feature that boosted airline employees’ productivity. Previously, if a plane didn’t take off for any reason, the mail had to be unloaded and re-scanned, piece by piece, before being loaded onto another plane. DBK created a “move” function that allows a quick and easy transfer of the mail from one plane to another. All it requires is that employees enter the old flight number and the new flight number, and all the mail from the old plane is assigned to the new plane.

Each of the solution’s 650 mobile computers was programmed to transmit bar code information to DBK via a national Wireless Wide Area Network (WAN) carrier. If an individual unit experiences Flash problems, its memory device can be removed, placed into another unit and the information transmitted from there.

Results

With the wireless system sending data to DBK’s network, the airline avoids the security risk and high bandwidth requirements associated with supporting hundreds of wireless devices. Instead, the carrier seamlessly gathers nearly 100,000 pieces of bar code information per hour, which is compiled and automatically delivered to the Postal Service.

What’s more, the extra features DBK built into the solution ensure that airline employees’ productivity is not significantly reduced or otherwise hampered by the scanning process.

Thanks to the solution created entirely by DBK, the airline can demonstrate its adherence to its contractual obligations with the Postal Service, which bring in tens of millions in revenue each year.

About DBK Concepts

DBK Concepts excels in delivering and developing mobile data-collection solutions, including customized, GPRS- and CDMA-based applications. With 16 years in wireless software, hardware and services, DBK has built a base of Fortune 500 companies that depend on its Application Service Provider (ASP) services as well as its maintenance and repair. The company also offers new and refurbished data-collection mobile computers, and largely serves companies in the retail, grocery, wholesale and transportation industries. Privately held, DBK was founded by Danny Katz in 1988 and is based in Miami.