HeliQwest goes digital with help from Windows Mobile

Overview

Country or Region: Canada
Industry: Transportation

Customer Profile

HeliQwest is an Edmonton-based helicopter charter company offering services including mapping, photography and forest fire suppression.

Business Situation

HeliQwest wanted a digital solution that would help its pilots fill out and synchronize safety forms with an online database in near real-time regardless of geographic location.

Solution

HeliQwest enlisted Microsoft® registered partner Cortex Software to deploy its Windows Mobile®-based FieldCenter application, which its flight and ground crews access via mobile handsets from TELUS.

Benefits

- Ease of use
- Streamlined office processes
- Simplified synchronization
- Do it yourself customization
- Visual reporting capabilities

"Thanks to the portability of FieldCenter and our Windows Mobile-based devices, we now have a more complete and accurate record of our safety procedures."

Randy Simonneau, director of operations, HeliQwest

HeliQwest is an Edmonton-based helicopter charter company that maintains one of the best safety records in its industry. To ensure safety, pilots reported hazardous situations and incidents by filling out forms and faxing them to head office where they were stored in a series of binders. However, pilots work in remote locations where access to fax machines is limited. In addition, because pilots are constantly on the move, forms were often misplaced. HeliQwest enlisted Microsoft® registered partner Cortex Software to deploy its Windows Mobile®-based FieldCenter application. The solution enables HeliQwest to build tailored mobile forms that allow pilots in the field to sync data with a central database in near real-time via the TELUS High Speed EVDO network. It also offers streamlined office processes and visual reporting capabilities.

Windows Mobile®

Situation

HeliQwest is an international helicopter charter company specializing in surveillance, mapping, photography, forest fire suppression and general transport. With offices located in Edmonton and Montrose, Colorado, HeliQwest's fleet of eight helicopters provide service to clients across North America and overseas.

HeliQwest's helicopter fleet has one of the highest utilization rates in its industry. The high volume of usage combined with piloting the helicopters into forest fires and remote areas creates a high-risk working environment. Because of this, HeliQwest is dedicated to ensuring the safety of it pilots, ground personnel and clients. Today HeliQwest boasts one of the best safety records in the helicopter industry.

To ensure this safety record stays intact, HeliQwest employs a detailed safety inspection process. Pilots report potentially hazardous situations, inspection results, worksite health hazards, incident reports and other issues by filling out a selection of paper-based forms stored in binders. Upon entering a new job site, pilots would be required to manually fill out specific inspection forms and then fax them back to the head office.

However, HeliQwest pilots often find themselves working in small towns or extremely remote locations where sending paper forms in a timely manner is difficult, simply because there is no access to fax machines. In addition, because the pilots are constantly mobile and not working in an office environment, misplacing the paper forms and binders became an increasingly common problem, which led to reporting issues.

"Some of our pilots may spend weeks in locations like an oil field camp that have no fax or telephone access. Staying in contact with them is always a challenge," says Randy Simonneau, director of operations, HeliQwest.

The infrequent and inconsistent method of transmitting information led to problems with maintaining records. For example, a one-page fax sent at a random time by a pilot could be lost in a large stack of several incoming faxes and not surface until weeks later.

"We realized that we had a larger problem when we were conducting a safety audit and fell short on documentation. We passed the audit without any problems, but definitely confirmed that our old system wasn't reliable or accurate enough to meet our needs," says Simonneau.

HeliQwest wanted a digital solution that would mirror its old system but allow its pilots to easily fill out and track their forms. The solution also needed to eliminate the need for fax machines and allow for near real-time transmission of the forms back to the head office regardless of where pilots were located.

Solution

In March 2008 HeliQwest contacted Cortex Software, a Microsoft® registered partner, after conducting research on mobile form solutions. The company was immediately interested in Cortex Software's FieldCenter application.

FieldCenter is a software platform that lets companies create tailored mobile applications such as mobile inspection or data collection, and transmit data to a central location for reporting purposes. The software consists of three main components:

1)A Web-based form authoring application that lets users build data-collection forms targeted to mobile devices, without programming;

2)A mobile application installed on Windows Mobile-based handheld devices used for downloading digital forms, inputting data, and transmitting completed forms to Cortex's hosted Web application powered by SQL Server® 2005 database software.

3)A Web-based dashboard that allows FieldCenter users at the head office to access all the completed forms transmitted from the mobile devices in the field. Users can then download, print or e-mail forms and reports to relevant recipients.

After two days of a trial evaluation, HeliQwest purchased licenses for FieldCenter and put the solution into action. Because the entire service is hosted by Cortex, HeliQwest didn't need to invest in any additional infrastructure or install additional servers. HeliQwest was already using Windows Mobile 6.0 devices purchased through TELUS, so Cortex was able to activate the service subscription and push the FieldCenter software to HeliQwest's devices over-the-air via the TELUS High Speed EVDO network.

"TELUS operates on Canada's largest High Speed network and allows HeliQwest to access broadband-like connections via their Windows Mobile-based devices," says Jim Senko, vice-president, Mobility Solutions, TELUS.

Following this initial installation, HeliQwest created digital versions of its safety forms using a form creation system provided by Cortex. The forms took approximately 10 minutes each to develop and were available to HeliQwest pilots almost immediately.

"FieldCenter is designed to appeal to customers of all levels of technical capability, which makes it suitable for companies of all sizes, big or small. Many of our customers have no technical staff and use FieldCenter because it empowers them to build their own custom forms. In bigger organizations, IT departments are using FieldCenter because it's fast, flexible and cost effective" says Joe Jabour of Cortex Software.

Benefits

Since deploying FieldCenter, HeliQwest has eliminated paper-based forms and fax machines from its safety procedures. The company is also experiencing a number of additional benefits.

Ease of use

Because HeliQwest's pilots submit their safety forms digitally into Windows Mobile-based devices, the problem of pilots accidentally misplacing the old paper forms has been completely eliminated. In addition, the pilots don't need to worry about carrying around binders or ensuring they have enough copies of the paper forms on hand to do their job. All information is centrally stored on their handheld devices and they have an unlimited supply of digital forms at their fingertips.

"Thanks to the portability of FieldCenter and our Windows Mobile-based devices, we now have a more complete and accurate record of our safety procedures," says Simonneau. "Our pilots are happier now because they have one less thing to worry about in the field."

Streamlined office processes

The introduction of the Windows Mobile-based FieldCenter solution has made filling out forms an easier process and streamlined processes at HeliQwest's offices. The need to manage faxes from pilots has been eliminated and all data sent in from the field is conveniently available from any Internet-enabled PC via the FieldCenter Web interface. Filing and organizing the safety forms has become a simpler, more efficient process that allows HeliQwest to call up specific information on demand.

"Having our information available on demand means that we have a clearer picture of what's happening with our pilots in the field. Rather than searching our records for the forms a particular pilot has sent in, we can now call up an instant snapshot of their situation based on the information they've transmitted via FieldCenter," says Simonneau.

Simplified synchronization

FieldCenter has also helped automate the data transmission process by enabling completed forms to be synchronized with the online FieldCenter Web application via the TELUS High Speed EVDO network. The HeliQwest pilots simply need to push a button to activate the synchronization process.

"The hands-off synchronization process is a major time saver for us. Our pilots don't need to worry about anything now except filling out the forms properly," says Simonneau. "Even the data entry process has been streamlined. Filling out the paper-based forms used to take an average of three to four times longer than inputting information into the digital forms via the Windows Mobile devices."

Do it yourself customization

FieldCenter enables HeliQwest to easily customize the application to meet the changing needs of the company. As new safety protocols are added to HeliQwest's procedures, new forms will need to be created. FieldCenter's simplified interface allows users to easily create an unlimited number of new, customized forms within a matter of minutes. This ensures that as the company grows and evolves, the software will continue to remain current and relevant.

Visual reporting capabilities

Using FieldCenter, HeliQwest pilots can now send videos and photos as part of their digital forms in order to better illustrate onsite conditions. This ability provides a useful window into what the pilots are actually experiencing at their locations, something that may not have been accurately captured using the limited fields available in the standard safety forms. In addition, the pilots can send large files quickly thanks to the bandwidth capabilities and speed of the TELUS EVDO network.

"For insurance and safety purposes, the ability to capture photos or videos using the built-in cameras on our Windows Mobile devices is extremely beneficial," says Simonneau. "For example, let's say one of our pilots is driving a truck to a site, backs into a tree and bends the bumper. He can now fill out the incident report as usual and include firsthand photos of the damage. After the syncing process, I can access the report and print it off in PDF format along with the photograph all in one shot. It's brilliant."

Overall HeliQwest is very pleased with the performance of its Windows Mobile-based FieldCenter solution. The company is currently testing additional handheld devices to be deployed in the field and is planning to introduce additional reporting capabilities such as maintenance and operational reporting, client billing and daily flight reports.

For More Information

For more information about Microsoft products and services, call the Microsoft Sales Information Center at (800) 426-9400. In Canada, call the Microsoft Canada Information Centre at (877) 568-2495. Customers who are deaf or hard-of-hearing can reach Microsoft text telephone (TTY/TDD) services at (800) 892-5234 in the United States or (905) 568-9641 in Canada. Outside the 50 United States and Canada, please contact your local Microsoft subsidiary. To access information using the World Wide Web, go to:
www.microsoft.com

For more information about Cortex Software products and services, call (905) 918-0630 or visit the Web site at:
www.cortexsoftware.com

For more information about HeliQwest products and services, call (780) 458-3005 or visit the Web site at:
www.heliqwest.com

Windows Mobile

Windows Mobile brings the power of the Windows® operating system to mobile devices, helping businesses and their mobile employees stay connected while on the go. Windows Mobile runs mobile versions of Microsoft programs, including Microsoft Office Outlook® Mobile, Internet Explorer® Mobile, Pocket MSN®, Windows Media® Player Mobile, and Microsoft Office Word Mobile, PowerPoint® Mobile, and Excel® Mobile. With Windows Mobile, information workers get powerful software combined with the familiarity of Windows. Combined with available service plans and connectivity options, Windows Mobile–based devices, available from 42 device makers and 68 mobile operators in 48 countries, can be used to make calls, send e-mail and instant messages, surf the Web, and access critical business information even when users are away from the office.
More information about Windows Mobile can be found at:
www.microsoft.com/windowsmobile

Software & Services
- Windows Mobile
- SQL Server 2005

Microsoft®