

WHITE PAPER

Field Forces Worth Mobile and Wireless Investments

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IN THIS WHITE PAPER

Field forces are among the most productive targets for enterprise mobility initiatives because their time-conscious jobs benefit from more efficient communication and because the operational efficiencies brought to these high-touch positions can affect the professionalism with which business is conducted at the customer point of contact.

This white paper examines the impact of equipping field forces with the wireless tools that streamline interactions between the field forces and their corporate systems. The focus of the white paper is on those factors driving the acceleration of mobile and wireless solution deployments and the benefits of these deployments. The white paper is based on interviews with multiple companies that have implemented wireless field service applications, and it contains a case study for one of these companies.

METHODOLOGY

IDC analysts conducted interviews with four companies that have implemented wireless field force applications using Research In Motion (RIM) BlackBerrys. One of these interviews was used as the basis for the case study presented in this white paper. All the companies interviewed are RIM customers, and RIM provided the contact names for the interviews.

SITUATION OVERVIEW

Wireless business enablement is hitting a wave of momentum and is demonstrating an important value proposition through cost savings, increased productivity, improved business processes, and realized return on investment (ROI). In 2005, the corporate view of mobile and wireless technologies advanced from an investment in personal productivity to an investment in corporate competitiveness.

Companies are past the understanding that mobile devices can be platforms on which users can leverage a range of personal and corporate data with greater flexibility than that offered by desktop and notebook computers. They now have a greater appreciation of the returns that come from putting the most up-to-date data into the hands of field workers who can do the most with it. Whether improving interactions with customers, partners, and suppliers or refining the processes that make data consistent at all levels in an organization, mobile solutions are better viewed as investments in future innovation that can inspire fresh ideas for building a new freedom and flexibility into corporate operations.

Success for any enterprise IT solution often hinges on how well it performs out of the blocks. If it delivers on its promises and proves its worth from the start to its front-line users, it is likely to be met with enthusiastic adoption. If it stumbles forward, however, it might never overcome the skepticism of its intended users and might never have the opportunity to prove its ultimate worth. Enterprises implementing mobile technologies, with an understanding of what is at stake, will look to reduce the risk and will rely on a strategic partner with a track record in designing and supporting mobility solutions. They will also focus on the applications and users on which mobility solutions will have the highest impact so that success is highly visible in the organization.

For those reasons, field service professionals have been among the most natural fit for enterprise mobile and wireless solutions because they are in time-conscious jobs in which efficient scheduling, dispatching, and communication can make the difference in whether a technician shows up at the right location, on time, and with the correct part. The urgency of a dispatch and the importance of efficient communication with such front-line workers also highlight the value of the mobile solution investment.

The use of mobile handheld and wireless technology can also alleviate many of the challenges firms face in managing a field force, such as tracking the movements of technicians through GPS-enabled devices with location-aware solutions as well as allowing customer data to be updated on home office servers as quickly as it is updated on the road. It can also ensure that each field technician starts the day with a detailed schedule that includes customers' service agreements, past history, warranty information, and special instructions such as what must occur in conjunction with the completion of a service call.

FUTURE OUTLOOK

Field workers are inherently mobile and have been getting their jobs done without advanced mobile technologies for years. However, times are different and so are the expectations. Field workers are now expected to be connected, responsive, and collaboratively informed with the ability to accept changes from dispatch centers on the fly. In the same way that hand-fitting devices with wireless connectivity are changing the expectations for how mobile professionals — once solely reliant on notebook computers — get their work done, so too are the expectations escalating for field forces.

The ability to exchange and update data from the field in real time is forcing a business process revolution that is being pushed by the advances in mobile devices and wireless data transmission technologies and pulled by the competitive ambitions of enterprises.

The promise of this revolution has long been prophesied. What is different today, however, is that many of the technical shortcomings of mobile solution components are fading to where even enterprise software vendors, which have been among the slowest to react, are putting much more development effort into optimizing their products for wireless environments. There is also a shift in where the initiative is originating within the enterprise. Previously, the initiative was primarily from IT

departments that needed to plan for the impact that mobile and wireless technologies would have on corporate systems. Now line-of-business managers more often are taking the lead role in identifying how mobile solutions can benefit their business processes. The fundamental difference in the tactics is that IT approaches the issue from a defensive standpoint that focuses more on costs, security threats, and support issues, while the focus of business managers is on how real-time access to data and streamlined processes can make the business case for the investment. This shift has led to more enterprises passing the trial phases of their deployments and further establishing the models for how work needs to be conducted in the era of the real-time enterprise.

Among the most visible field force models are UPS and FedEx. Both companies empower their drivers with mobile technology so that packages are tracked in real time, allowing alerts to be sent to senders and receivers within minutes of a delivery. These examples are raising expectations for everyone and proving how tracking the movements of field workers can be as important to the investment as improving other applications.

There may be as many different motivations behind mobile solution deployments as there are different types of field forces. The commonalities, however, almost always revolve around flexibility and efficiency, such as the flexibility to react to changes, flexibility in communication methods, and bringing efficiencies to time-sensitive business processes.

CASE STUDY: NETJETS

Background

NetJets® Inc., a Berkshire Hathaway company, is a leading provider of safe and secure private aviation solutions. NetJets' fractional aircraft ownership allows individuals and companies to buy a piece of a private business jet at a fraction of the cost of whole aircraft ownership and guarantees availability 365 days a year with just a few hours' notice. The NetJets large and diversified fleets include 15 of the most popular business jets in the world. Access to the NetJets fleets is also available in the form of a short-term lease, which is sold on an all-inclusive, prepaid basis in 25-hour increments through an exclusive alliance with Marquis Jet Partners. NetJets Inc. also offers aircraft management, charter management, and on-demand charter services through its subsidiary, Executive Jet Management.

Challenges

NetJets' customers do not follow predetermined flight schedules. Customers can order a jet for as soon as four to six hours from the time of their request, depending on interest, size, and aircraft type owned. The company's field force, which comprises pilots, cabin crews, and aircraft maintenance personnel, needed the support of a system that would help manage flights but that would also elevate its customer service so it could deliver the exceptional flying experience expected by its customers.

Because NetJets flies into general aviation airports, its pilots communicated with the NetJets dispatch center through phone calls and faxes. Pilots phoned in their flight logs to call centers where they would report information on the completed flight and be briefed for their next flight. Although effective, the process was not going to scale with the company's growth; the number of pilots and flight crew members has increased from 200 to more than 2,000 over the past five years.

Solution

In 1999, NetJets launched its first wireless application on RIM 950s running on the data-only Mobitex network. The devices ran a custom application called CrewComm, which exchanged the most necessary flight, catering, and customer (including ground transportation requirements) information and was justified on the savings of full-time employees in what would have been fast-growing call centers. Pilots, however, were still required to carry mobile phones so that critical updates or changes could be communicated and acknowledged with an immediacy that two-way text messaging could not convey.

The success of this initial application, and its goal to get to a multifunction platform that would grow with its data and voice communication needs, prompted a 2005 upgrade to converged Blackberry 7290s and an application update that allowed richer data to be sent to its front-line workers. The original application was justified on cost savings, but the new application and devices were justified as an investment in NetJets' flight crews.

As is typical with field forces, existing methods were sufficient in fulfilling the basic requirements of the job, but NetJets wanted to improve the quality of work life for its flight crews. It understood how delivering more complete data would improve its delivery of service, but it valued how the efficiencies would ease many of the tasks for which its crews were responsible.

Because fractional jet service is a unique industry, NetJets could not turn to off-the-shelf software. It contracted with Mirifex — a management consulting firm — to work with flight crews on the requirements for the new application and migrate its existing architecture to one that would leverage the strengths of the Blackberry Enterprise Server and Mobile Data Service (MDS) and the Java and color screen technologies of the new devices.

The new flight management application is rolling out in stages and ultimately will run on every pilot and flight crew Blackberry. Where the original application delivered abbreviated summaries of flight briefs, which often needed to be followed up with a fax or a phone conversation, full flight briefs with comprehensive schedule and customer information are now delivered to the device and navigated through its various menus. A maintenance request application was also added so that crew members could electronically report minor repairs required to an aircraft's interior. Previously, crew members faxed paper forms to a maintenance control center and then waited for work orders to return via fax or phone call. The new device also includes wireless voice capabilities, allowing the flight crews to carry a single device.

Benefits

Although this solution and its applications are unique to the business of managing flight schedules, the benefits are considered typical in field force mobilization efforts.

- ☒ Wireless field force solutions can bring new levels of efficiency to the interactions between a dispatch center and its field force and eliminate various manual administrative processes that consume time and cost.

NetJets' flight crews now receive all the information regarding destinations and customer requirements electronically on their Blackberrys, eliminating the inefficiencies of phoning busy call centers and waiting for faxes. Flight crews are also able to close out completed flights on their devices. Where they once needed to call in details that were important to the billing cycle, such as fuel loads, time lapsed, and catering and other goods used, the system handles this task electronically and reduces the administrative efforts on the back end.

The dispatch center also gained efficiencies as a result of the record log created by Blackberry emails. Because the internal flight system tracks when a pilot opens an email containing a flight brief, the system recognizes it as an acknowledgement and gives the crew the green light to fly without having to follow up with a phone call.

- ☒ The ease with which data can be accessed, recorded, and delivered to corporate systems from the field opens the opportunity for field workers to capture new types of data that can improve how timely and personal customer service can be delivered.

Flight crews have a convenient way to log customers' experiences on flights using a new rating system on the device that allows NetJets to measure how successful it is in delivering superior customer service. Because the rating is sent to the home office within minutes of a flight's completion, it opens the opportunity to address customer issues with an immediacy that proves NetJets' commitment to delivering a first-rate flying experience.

Another new application — an aircraft appearance application — allows crew members to rate the appearance of aircrafts and point out such issues as dirty carpets, broken DVD players, and so forth. The form is directed to an aircraft standards department, which uses the information to issue work orders as well as rank which aircraft are due for interior overhauls.

- ☒ Wireless solutions project a level of advanced professionalism for customer-facing field forces and help meet the growing expectations that field workers have intimate knowledge of customer histories.

Blackberrys give the NetJets flight crews a professional appearance that matches the image of an exclusive airline with uniformed pilots flying state-of-the-art jets. Although customers will not always appreciate the wireless capabilities in the hands of crew members, because most of what is done happens out of their sight, they benefit from the more timely and personal customer service the solution promotes. The wireless connection to the back office also builds the confidence of crew members and how they feel about their ability to meet the expectations of their discerning clientele.

CHALLENGES

The challenges of wirelessly enabling systems used by field forces go far beyond the technical hurdles of integrating corporate systems to a wireless environment. Nonetheless, how well a system is technically architected will be critical to overcoming what is arguably the most important challenge: user acceptance.

Because most field forces have established processes and communication methods for carrying out their responsibilities, adoption of new methods can meet resistance, especially if the system falls short of expectations from its start. Getting the system right from the beginning is critical to ensuring its enthusiastic adoption over the status quo procedures.

Systems that get it right are designed to meet the needs of the users as much as the requirements of the business. The efficiencies a company receives from the wireless solution should also translate into a smoother workday for its field crews. The system should perform in the environment where work is conducted and should not stretch the technical aptitude of field workers to where the technology could be an obstacle to its use; rather, it should bring a sense of empowerment and confidence to a worker's ability to perform at a high level.

Wireless field force systems that consider the worker experience are most likely to meet with higher user adoption and a quicker realization of the benefits of an enterprise mobility solution.

CONCLUSION

- ☒ The returns NetJets receives are typical of field force mobilization projects because the company improved what was already a vital step in its business of flight management. The immediate returns are the speed and streamlining of processes that cut costs through manpower, administration, services, or technology. Rather than phone in or fax information, NetJets wirelessly sends all necessary information about upcoming flights and customers to the flight crews' Blackberrys, which reduced the company's need to grow its call centers at the pace it grew its flight crew personnel. The return from the efficiency is a more automated process that puts all the information into the hands of the flight crew personnel who need it to deliver the customer service that NetJets wants. Also, its field force members receive the information in a method that makes their jobs easier while providing the flight center with the communication records and logs to find additional efficiencies.
- ☒ Mobilizing enterprise applications should not be done for mobility's sake. Although there will be growing pressure to keep pace with the mobility efforts of competitors, mobile solutions should always be centered on a business case that weighs its benefits and costs against the alternative methods for getting the job done.

- ☒ Enterprise mobile strategies should focus on extending standing investments and unleashing the value of existing applications. The most powerful applications are those being used every day by workers. The ability to provide field forces with access to these applications is the true value of a field force mobilization project. Providing field workers with key sets of application access within a mobile environment delivers significant business advantages and addresses the strategic needs of the organization.

- ☒ Successful wireless solutions often depend on companies not rebuilding but rather leveraging existing deployments using a vendor that can deliver on a scalable solution. Key attributes include a global, standards-based offering that is integrated with existing enterprise systems and one that includes management and security components and a support structure. An extensibility-ready architecture must be inherent in any wireless offering providing offline access and API connectors to access common enterprise applications and legacy systems, a professional services organization within the vendor or strong partnership, and a framework for deploying applications.

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