

Success Story

A case study about exceptional value we provided to our clients



Mobility Solutions

EMERGENCY PLANNING & RESPONSE—CONNECTING PEOPLE AND INFORMATION WHEN IT MATTERS MOST

Emergency preparedness took on a new sense of urgency in the wake of the anthrax attacks that targeted the nation's mail distribution networks. Johnston McLamb helped one agency ready itself to deal with similar situations by implementing a mobile solution that has enabled the nationwide coordination of emergency planning and response activities. Empowering the flow of information for incidents ranging from power outages to acts of terrorism, the solution has gained international recognition as a model mobility computing implementation.

JOHNSTON MCLAMB'S MOBILITY SOLUTIONS HELPED THIS AGENCY:

- Map an organizational need to the most appropriate mobile solution
- Connect more than 7,500 employees at headquarters and field offices via a web-based application
- Mobilize more than 3,200 of those connected users via handheld devices
- Enable the communication of real-time, actionable data so that employees are now empowered to take action in the field in times of crisis

PROJECT SCOPE

Johnston McLamb designed and developed this system with one overarching goal in mind: to help the agency manage emergency planning and response activities before, during, and after crisis situations. The system supplies desktop, voice, and/or wireless communications to more than 7,500 individuals who are responsible for coordinating emergency planning and response activities for the agency across the nation.

When an emergency occurs, the system automatically provides details of the event to employees' mobile devices so they can indicate if they are available to respond and carry out the duties assigned to them. These duties encompass a wide variety of tasks, such as evacuating buildings during fires, preparing for earthquakes, cleaning up after hurricanes, and coordinating responses to terrorist activities. At the management level, the system provides consolidated access to quickly review and manage the reaction to the events impacting the operations of the 35,000-plus facilities countrywide.

CHARTING THE FLOW OF DATA

Johnston McLamb began by helping the agency fully define how information related to these processes needed to flow across the organization. Because the system would distribute information to employees during crisis situations, the organization needed to define which employees would need access to the data, how they would most effectively be able to access it, how any feedback from the field would be reported back to a central location, and how that feedback would be redistributed to others in the field. Additionally, the organization had to consider the role of automating specific communications, such as information related to fire alarms at facilities. Which emergency management team members needed to receive these notifications? What information did they need to receive? Was there any information they needed to report back to headquarters?

Johnston McLamb guided the agency through this process. We developed a complete map for moving information across the enterprise and documented business rules that the agency uses to determine the escalation level of various emergency threat types. Johnston McLamb also implemented a link to the Department of Homeland Security to enable the display of the current threat level within the United States.



This threat level data connects mobile users to real-time information relevant to escalating emergency situations. Finally, Johnston McLamb began to identify how a mobile solution might help improve this information transfer.

SELECTING AN APPROPRIATE MOBILE SOLUTION

Throughout the information mapping process, it quickly became clear that the geographic diversity of the agency's facilities was going to play a major role in any technical solution. Johnston McLamb began by helping the agency form a plan that was centered around a web-based solution.

It was also discovered that a majority of emergency response officials did not have access to computers during some parts of their days. The solution would clearly need to have a mobile element to fully meet the business goals that the agency had defined. Johnston McLamb began working with the agency to identify a mobile solution that could effectively be integrated with its existing infrastructure.

The agency was already considering the use of mobile handheld devices to meet another business need, so Johnston McLamb assessed how that same technology and hardware could be used to enable emergency preparedness and response processes. We constructed a prototype that demonstrated how data provided by an application hosted on the agency's network could be accessible from a handheld device in the field.

The agency decided to rapidly move forward with providing these handheld devices—equipped with a custom-built, web-based application—to all emergency management team members across the nation. These handhelds would provide users with access to corporate email, contain an integrated cell phone, and provide access to emergency management team contact information, task lists, and other emergency response information.

ROLLING OUT THE TECHNICAL SOLUTION

With the direction set, Johnston McLamb began development of the web-based system and the mobile interface needed to support the processes and goals defined by the agency. The solution would leverage existing technologies and devices within the organization and would automate—wherever possible—emergency preparedness and response processes.

A multi-tiered system (web and mobile) was achieved by developing and deploying JAVA, PL/SQL, and XML code bases. The core web application was developed using JAVA, while the mobile components utilize PL/SQL and XML.

Additionally, Johnston McLamb provided support throughout the agency's procurement and distribution of additional handheld devices. This involved not only the selection and distribution of appropriate devices, but also the configuration of the devices so they could be able to receive icon/channel pushes related to these processes.

SCALING TO FIT BUSINESS NEEDS

As with all mobile applications that Johnston McLamb has created, all recommendations and development are done with future scalability in mind. Within months of developing this system, the agency saw an opportunity to integrate it with

another application that used email to communicate alerts if a potential crisis in the process chain was detected. In conjunction with all involved groups, Johnston McLamb helped the agency identify integration points and extend the emergency planning and response system to interact with this related system.

Alerts generated by the automated crisis detection system are now integrated into the emergency planning and response system developed by Johnston McLamb. Automated voice and email alerts are being provided to all appropriate emergency response team members and management staff, regardless of location.

REAPING THE BENEFITS OF MOBILE

The system has become a key tool in the agency's emergency planning and response activities. Today, the system has more than 7,500 users— with more than 3,200 connecting via handheld devices. Each quarter, an average of 400 events are reported and tracked in the system.

By leveraging mobile technologies, the agency is providing personnel with the real-time access to data that they need to plan for and respond to real emergency events in the field. The system has accomplished many of the goals the agency set out, including the centralization of all communications related to crisis responses. Through integrating with existing agency applications and external business partners, the system has provided business services for document and user management, data synchronization, and automated mass communication to predefined team structures. This structure enables the operational responders in the field to focus more effectively on managing emergency situations by providing tools to streamline their information management and communication needs.

TIPS FOR USER ACCEPTANCE AND SYSTEM SUCCESS

- Implement hands-on training courses so that users new to mobile devices are comfortable with the technology
- Give detailed instructions on why and how to use the system so that users fully understand its role in their daily workflow
- Create an online knowledge repository to allow users to submit questions to experts and view responses
- Engage users early to determine whether any interface changes are needed to enhance usability on mobile devices

USING MOBILE TO ACHIEVE THE MISSION

Moving an organization toward mobile computing doesn't just mean providing email in the field anymore. It's about understanding how information flows across your organization and how a mobile solution can improve that flow and increase the efficiency of all your business operations. Ultimately, it's about building scalable mobile solutions that are ready to grow and evolve when you are.

Contact Johnston McLamb at

jmsales@johnstonmclamb.com to learn more about how

our Mobility Solutions practice can help you move into the mobile age and empower your field staff to make the strategic business decisions you need to get ahead and stay ahead.