

SUMMARY

Daugherty's mobile application allows Field Officers to easily and quickly enter rule checks and safety information.

OUR SERVICES

- Management Consulting
- Business Intelligence
- Custom Solutions
- Mobile Computing
- ERP

CONTACT US

For more information on any of our services please visit us on the web at [www.daugherty.com](http://www.daugherty.com) or contact us 800.737.8200.

OFFICES

- St. Louis (HQ)
- Atlanta
- Chicago
- Dallas
- Minneapolis

## Mobile Application Reduces Risk and Liability for Railroad

### BUSINESS CHALLENGE

Transportation Officers were spending an estimated 60% of their time ensuring that train and engine service employees complied with Operating Rules, Safety and General Conduct Rules, Rules for Equipment Operation and Handling, and Timetable Special Instructions. To assess whether an employee adheres to these rules, a Field Officer conducted rule checks (i.e. observations of compliance on specific rules) and safety contacts (i.e. training session with employees regarding a specific area of safety). It is essential to have the checks and contacts recorded as quickly as possible in order to have an accurate history in case an incident occurs. Rule checks were recorded using mainframe IDMS screens. These screens were tedious and complicated to use. For example, the sequence and context of data was not intuitive and the user had to use several other reports and mainframe screens to collect information in order to properly enter data. The actual entry of the rule checks and safety contacts were sometimes occurring hours or days after the actual observation due to the limitations of the application.

### SOLUTION

The solution focused on the rule check and safety contact entry tasks to make them easier, quicker, and more accurate. The deliverable included a new mobile application that had easy-to-use screens that allowed Field Officers to immediately input rule checks and safety contacts regardless of whether their mobile notebooks were connected to a network or not. To enable this disconnected work mode, Rules and Employee Information are downloaded to the laptop seamlessly and without requiring any action from the

### RESULTS

- Drastically improved quality and timeliness of safety and compliance data.
- Reduced business risk and liability.
- Use of the mobile application increased from 17,000 rule checks for the month of July 2007 to over 200,000 rule checks for the month of January 2008.
- Savings have been estimated at over 1 hour per day per employee using the mobile application.

user, whenever the laptop is connected to the network. User rule check and safety contact entries are queued for submission while the user is disconnected, and are, again, seamlessly uploaded to the server whenever the laptop is connected to the network. The web server accumulates user submissions for download to the mainframe. The custom message queuing mechanism uses standard HTTP request/response protocol to web services on the server so that DNS name/IP address latency does not prevent server responses from reaching the laptop, regardless of where or when it is connected to the network. The application components were developed on a .NET platform.