CASE STUDY
MOBILE INSPECTION SYSTEM

OPPORTUNITY OVERVIEW
Develop an inspection system for a Fortune 500 (209) food manufacturer designed to reduce and/or eliminate paper-based inspections while providing better tracking of data collected.

CLIENT OBJECTIVE
Phase 1: 35 to 40 safety-related inspections completed at the food manufacturer’s Lakeville, MN plant are completed using paper-based safety inspections. Once completed, the inspection data is transferred into a database for record keeping and report generation.

The client desires to convert the paper-based system for hazard identification inspections, to an electronic system which will provide data access and tracking while also reducing the time requirements and cost associated with completing the required inspections. Because of the large number of inspections to be completed and the volume of units to complete for each inspection, there is a significant labor cost each month to complete the inspections and a significant risk of missing or incorrect inspection data.

Future Phases: Expand the use of an automated electronic inspection and observation system for other types of inspections including quality assurance, food safety, GMPs, maintenance, CIP; observations: safety behaviors, and quality behaviors.

TARGET AUDIENCE
- Inspector
- Department Supervisor
- Plant Management
- Food manufacturer’s corporate personnel

RUSSELL ASSOCIATES’ SOLUTION
The client worked with Russell Associates to test and evaluate the use of Russell Associates’ automated safety inspection software, inspectiTRAC™, at their Lakeville, MN plant. Upon completion of the pilot phase, it was decided to continue the customization of the tablet-based, plant-wide automated inspection system.

Russell Associates developed and customized an inspection application running on a Windows 7 tablet PC that presents the user with a touch screen index of all inspections. After selecting the inspection, a graphical layout of the inspection area and icons of the inspection items appear on the screen. The touch screen tablet interface allows the user to pan the map and click on an icon to provide inspection data for the selected item, including detailed information for failed inspections.

Once inspections are completed, data can be exported to an Excel spreadsheet for additional manipulation and reporting by employees of the food manufacturer; be saved to a share drive, or uploaded to inspectiTRAC™ Manager, a cloud-based management software. The use of an inspectiTRAC™ tablet-based system reduces the lead time for data availability and gives immediate access to data by all stakeholders. The ease of data accessibility also allows tracking data related to deficient and/or out-of-compliance equipment and identification of safety hazards.

RESULTS
There is a significant reduction of labor and time required to complete inspections at the food manufacturer’s facility.

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<tr>
<th>Safety Inspection Labor Requirements Comparison</th>
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<td><strong>Labor Requirements</strong></td>
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<td><strong>Paper-Based Inspections</strong></td>
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<td>4 Team Leads &amp; 12 to 20 Employees; 725 to 1,050 hours per month</td>
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CUSTOMER COMMENTS
- The time and ease of using the tablet versus a clipboard/pencil; there is no comparison.
- The touch screen is user-friendly and is faster than trying to find your place on an inspection sheet with multiple pages.
- Mapping of the facility is visual and allows the person to walk right to the item being inspected.
- What used to take 32 hours with 15-20 people performing inspections is now done in 48 hours with 4 people.
- There is no filing time; you just do the inspection and sort it electronically – you can display the data in many different ways.
- It’s easy to sort the data for comparing trends.
- The data can be arranged in numerous ways to allow all angles to be examined.
- Accountability and corrections of failed items are easily tracked.
- Notes for each item are simple to record.
- Additional notepad attachment helps to address other issues that may appear during the inspection process.
- Camera on inspectiTRAC™ allows you to have instant evidence of pass vs. failure on items as well as guide others to repair correct issues.