With Automated Data Capture and Tracking, Pound Gates Accelerates the Speed and Accuracy of Vehicle Inspections and Saves Close to £1 Million

"Checking around 1.45 million new vehicles during transit annually, our teams must work efficiently, conduct inspections to predefined contract criteria, and log information into back-office systems. With Codeway, we've deployed handheld computers to deliver against these demands. The devices present inspectors with forms automatically configured to each make and model of car, to capture precisely the data for each contract. The consistency, quality, and timeliness of records have improved significantly. And transmitting data direct to the back office removes the need to rekey inspection reports; based on the quantity of vehicles we've checked over the last four years, the time and cost savings approach £1 million."

Neal Gordon, Operations Director, Pound Gates

Customer Profile

Company
Pound Gates

Location
UK

Industry
Automotive / Logistics

Motorola Products
Motorola MC9000 and
MC9094 handheld mobile computers

Applications

Web Portal – Contract Configuration
▶ Predefine criteria for inspectors to collect the client's requirements for each contract
▶ Set up new data collection variables quickly and easily

Mobile Data Collection – Inspection
▶ Bar-code scanning for vehicle identification
▶ Automated data capture by completing inspections on forms as specified by the contract
▶ Printing mini reports, to attach to each vehicle, confirming their condition at key points during transit
▶ Transmission of collected inspection data to web server

Web Portal – Reporting
▶ Presentation of inspection reports in a variety of formats, through customers' web browsers
▶ Downloading of customer-defined reports (as spreadsheets for analysis and for use with business systems and reporting tools)
▶ Analysis of inspectors' activities in the field

Benefits
▶ Removal of administration costs for rekeying data approaches £1 million
▶ Customers receive reports in close to real time
▶ Pound Gates can rapidly add customers and services and easily create new contracts
▶ Reports can be changed very quickly to respond dynamically to customer needs
▶ System provides capacity for new contracts and growth

Challenge: Enhance operating efficiencies

Pound Gates inspects around 1.45 million vehicles at transport hubs (ports and rail terminals) each year. With such a large volume of business, it defined the need to introduce electronic data capture systems to ensure reports are produced accurately and to a consistent quality while also reaching customers as quickly as possible.

Solution: Remote data capture and tracking

Codeway helped deploy a remote computing system comprising Motorola handheld mobile computers and bespoke applications (that it developed) to electronically capture and transmit inspection data to the back office.

Business value: Huge time efficiencies and improved customer service

Data records are more accurate, consistent, and comprehensive. And with reports available quickly, logistics managers are aware of any problems before their customers contact them. As the system is easily configurable, Pound Gates can simply create new forms for additional makes and models and offer new services. It has also stripped out costs and errors associated with rekeying data from paper forms into the back-office system: Over the last four years the dividend of automating data capture in saved time and team resource is approaching £1 million.

Pound Gates

Pound Gates provides risk management, insurance, and vehicle management services. The vehicle management team inspects 1.45 million vehicles a year with operations in the UK, throughout Europe and the Mediterranean, on an ad hoc or regular basis at compounds and during sea, road, and rail carriage.

Improving customer service

Pound Gates' vehicle inspection teams work at ports, vehicle pounds, and railway hubs, checking the condition of new cars. Customers are primarily logistics companies.

It identified that electronic data capture, tracking, and analysis could deliver major advantages. Neal Gordon comments: "Information from inspections took a long time to reach customers who were often contacted with complaints about damage to a vehicle before they were aware this had happened. They then had to back track to trace the vehicle and cause of damage to effectively manage claims. This could become a full-time job so speeding up the flow of inspection information would add great value to our customers."

Pound Gates' inspection business was also growing, creating the demand for efficient processes. Neal Gordon says: "Checking over a million vehicles a year using manual systems is very time-intensive. For instance, field reports had to be re-entered into back-office systems, creating a time and cost overhead. With mobile computing becoming much more advanced and stable, we believed it could remove workflow duplication by filing data straight into the back office, enhance data capture, and differentiate our business by service quality."

Working with Codeway

Pound Gates spoke to three specialist vendors experienced in deploying track and trace systems before selecting to work with Codeway. "Codeway has deep knowledge of deploying electronic data capture and tracking systems with specialist insight into the automotive arena," observes Neal Gordon.

"Also, its skills covered the range of our requirements including device selection, application development, integrating the technology with the back office and overseeing deployment. With Codeway on board, we moved on to spec the project with particular attention focused on device and application requirements.

Device selection

After initially deploying devices from another manufacturer, Pound Gates is transitioning teams to Motorola's MC9000 and MC9094 rugged handheld computers. As Neal Gordon explains: "One of the problems with the initial equipment was that it couldn't really cope with the worst of the weather and connection pins were corroding. After testing a range of alternatives we went for Motorola. The products are tough, robust and weatherproof. The scanner on the 9000 range is also the most accurate we've seen, overcoming depleted codes to deliver accurate readings. This is important as we scan bar codes on windscreens to identify each vehicle and the codes often fade in sunlight."

Application development

When creating the applications, the team spent a good deal of time analyzing how inspectors work and the different criteria that each manufacturer has for how their vehicles should be checked. This information defined the core capabilities for the system.
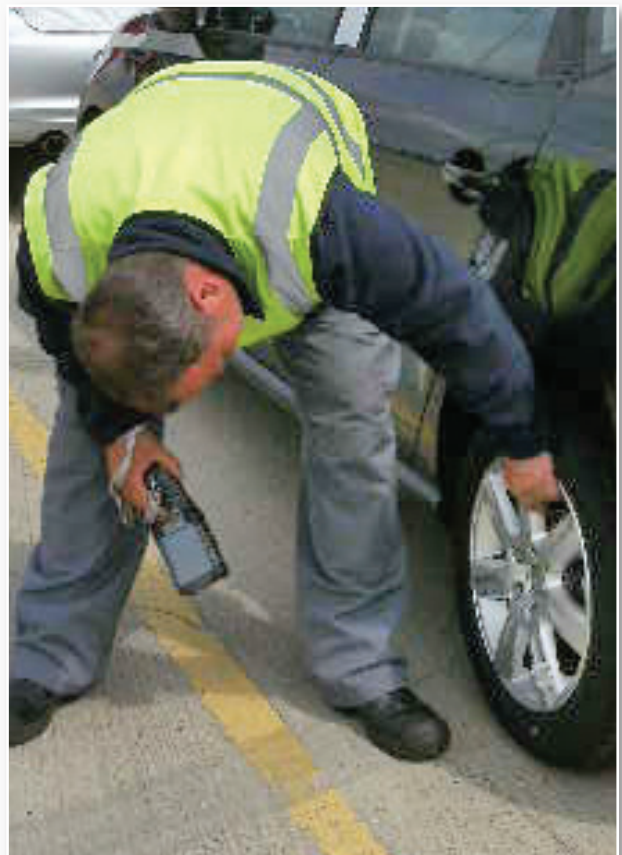
Logging in and vehicle identification

When logging in to the MC9000 and MC9094 devices, inspectors register their location and the contract they're working on. They're subsequently presented with the contract profiles for the make and model of vehicles to check, identifying each vehicle as they go by scanning a bar code.

Using a Bluetooth® wireless printer, inspectors can also print out damage assessments at each stage of transit and fix these to the vehicle. Key to the process are the automated forms generated by the Codeway system to guide inspections.

Versatile by design

The software to create data collection forms for the Motorola terminals is highly configurable by design. Pound Gates have defined dozens of data collection variables relating to cars, routes, destinations, quality of vehicle handling at transport hubs, and much more. They can set up new variables in the Codeway web portal software and attach variables to them such as simple checks (e.g. yes and no), text boxes, drop-down lists and more complex multiple-choice options.

Each variable can be easily reused by Pound Gates to create new contracts with virtually endless variations / options. This ensures that customers are provided with inspection forms tailored to their exact needs; the inspection requirements of insurers for instance differ from those of logistics companies or manufacturers.

"When customers come to us with new requirements, we can easily create automated inspection forms for them. It takes a matter of minutes to set up a contract compared to days previously," observes Neal Gordon. "Also, we can amend forms very quickly. A few years ago for instance there was a storage facility that had a problem with contamination – we were able to simply insert a new field to check if metallic paint was being damaged as a result. When potential customers see the system they're very impressed with its flexibility to collect exactly the data they need."

When inspections are complete, the teams attach their device to a docking cradle to sync the data with a PC for transmission to headquarters for inclusion in the database that sits behind the portal operated by Pound Gates.

Displaying customer data

Using any web browser, Pound Gates can easily view inspection data. Likewise customers can use a secure login to view the detail relating to their contracts. They can also print off reports in a range of formats, and select data to extract into a spreadsheet to integrate with their own reporting systems. The information presented reflects the inspection process that's unique to each Pound Gates' customer and its contracts as well as the make and model of car.

Commenting on the design of the web portal, Stuart Lucas, Codeway's automotive industry specialist, says: "The web portal is the core, customer-facing part of the system. Some complex work was undertaken to provide the freedom for customers to review their contract data in a wide range of formats and import it into their own spreadsheets and reporting systems. The automation of data capture and display delivers major competitive advantages."

The technology also provides commercial opportunities including offering services to check the way sites are run and vehicles handled at ports. And Pound Gates can analyze the performance of its teams, measuring how long they take to view cars and the volume of checks conducted. This data feeds back into training for the inspection team to continuously improve quality and adds to the benefits of the system.

This point is emphasized by Neal Gordon who concludes: "By automating data capture we no longer need a dedicated team to rekey reports back at base. We estimate that over the last four years, based on the millions of vehicles we've assessed, the time and cost savings associated with this improved efficiency are approaching £1 million."

An advanced industry with advanced reporting

Concluding with his thoughts on the project Neal Gordon observes: "While the automotive industry is one of the world's most advanced, the way inspection reports were collated was outdated. We've closed this anomaly, delivering highly accurate, detailed and close to real-time feedback to our customers. We've differentiated our business, have the infrastructure to easily add more customers to the system and inspect more vehicles, and stripped out major costs; we're delighted with the deployment."

About Codeway

Codeway provides complete expertise across technologies, planning, integration, deployment, and support to help companies identify, track, and control things anywhere in manufacturing and supply chains. Its unique blend of experience, capabilities, and enthusiasm ensures customers profit handsomely from automatic identification and data capture technologies including bar coding, mobile computing, labeling, and RFID.

Produced for Codeway

Codeway

IDENTIFY:TRACK:CONTROL
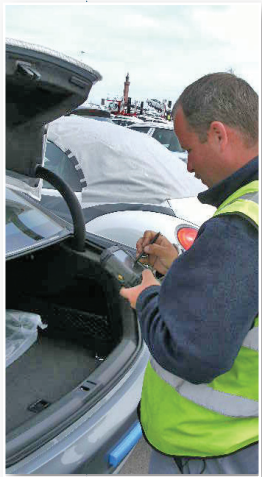
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