

Case Review: TrackIT

TSL Product: 1059 Multi-ISO RFID Reader for Motorola MC70/75/75A

TrackIT utilize TSL's Multi-ISO RFID Reader for increased security and efficiency



Client

- + Supreme Fuels
- + Location: Global Operations
- + Sector: Fuel Logistics



Outline/Summary of solution

Benefits:

- + **Enhanced performance:** With real-time, or close to real-time, communication, Invoices are generated much faster than previously
- + **Improved efficiency:** The automated systems require less manual input from staff, supporting more efficient and productive site operations
- + **Improved customer service:** Invoices are released faster and data is far more accurate. Customer signatures can also be called upon to help address any transaction disputes
- + **Business intelligence:** Analysis of fuel sales and returns enables head-office to accurately assess fuel stock levels and plan replenishment
- + **Adapting to changing circumstances:** By sending updates to the handheld devices, remote teams have access to the latest customer information details, for instance on any blacklisted or inactive accounts
- + **Security:** The scope for fraud is reduced through validation of customer cards and PIN and signature capture

“To supply fuel in some of the world’s most inhospitable environments, you need the back-up of highly robust, innovative, and reliable systems to support operations. Technology Solutions (UK) Ltd (TSL) with Motorola’s MC70 handheld have provided this capability for our Afghanistan depots. Its HF attachment enables our field teams to do Point of Sale (PoS) applications to validate customers’ identities and charge cards to process fuel sales and returns. With real-time or close to real-time communication from the device to back office, we can issue invoices much faster and understand stock levels. The automated systems have replaced paper processes, saving us a great deal of time, and improve service by providing customers with faster, more accurate transactions.”

Context

Supreme Fuels provides fuel services in some of the world’s most difficult environments. To enhance the systems and processes available to teams managing remote depots, Supreme Fuels reviewed the potential for mobile technology to enable a range of applications in the field and improve customer service. “We’re always looking to refine our operations and recognized that mobile communications – which have really advanced in recent years – could enhance the operations of our depots,” says Karsten Radon. “We were particularly keen to automate data collection during the fuels sale process. The goal was to increase the accuracy of data collected, verify customer identities, and speed-up the issuing of Invoices.”

Supreme Fuels opted to work alongside TrackIT, a specialist in automatic data collection, tracking and visibility, to develop and deploy the mobile computing system. As explained by Karsten Radon: “These deployments require in-depth knowledge of mobile devices, the development of applications, and the integration of the technology into back office systems. It can be complex work and we were confident that TrackIT’s expertise across the key components of this deployment would deliver a successful project.”

Challenge

Supreme Fuels required technology to oversee the remote operations of its fuel depots – with the caveat that many sites operate in some of the world's most remote and inhospitable environments with slow and sporadic network availability. The technology needed to support authentication of transaction and an automated way to capture who the fuel is dispensed to.



Solutions

TrackIT deployed a remote computing system comprising Motorola rugged handheld computers equipped with TSL's HF RFID card reader. The applications run from a central server that enables transmission of records and information between the devices, the central application server, and Supreme Fuels' ERP system.

Applications:

- + **Point of Sale (PoS):** Using a snap-on card reader, staff swipe customers' fuel cards and ask them to validate identity using a PIN. The data is checked and a receipt printed using a Zebra printer. An Invoice is automatically created within the ERP system to be sent to the customer's company. Teams can also manage the same transactions by scanning the bar code on customers' cards using the handheld computer
- + **Fuel returns:** Using customer's Supreme Fuels cards, teams can check customer identity and process fuel returns via TrackIT's central server into Supreme Fuel's ERP system; the system automatically creates a Credit Note where required
- + **Fuel receipts:** Any incoming fuel to the fuel station is also transacted using the handheld which updates the tank levels and gives complete visibility for the stock available in each location and each tank
- + **Real-time data transfer:** Where Wi-Fi or GPRS coverage is available at depots, all data transactions are conducted in real-time
- + **Bulk-synchronization:** Where an immediate connection is not available, transactions are stored locally on the device. The data is pushed to TrackIT's application server when coverage is established wirelessly, or using docking cradles in the office linked to a wired internet connection
- + **System updates:** The central server updates the handheld device on an ongoing basis (e.g. new customer details)



Response/Feedback

Commenting on the overall performance of the technology Karsten Radon says: "We are very pleased with the performance of the technology. The scope for fraud is reduced as we can validate customers' identities quickly and accurately. We have cut the amount of paperwork our teams need to manage. We are able to invoice customers much faster and with greater accuracy to improve customer service. And we can update our teams remotely on new accounts, and any changes to customer status. Overall, the system is supporting the efficient running of our fuel services in often very demanding and challenging environments, underlining how far mobile communications have evolved in recent years."

+ About TSL

TSL designs and manufactures both standard and custom embedded, snap on and standalone peripherals for handheld computer terminals. Embedded technologies include:

- RFID - Low Frequency, High Frequency and UHF
- Bluetooth
- GPRS/GSM
- IrDA
- Contact Smartcard
- Fingerprint Biometrics
- 1D and 2D Barcode Scanning
- GPS
- 802.11 Wi-Fi
- Magnetic Card Readers
- OCR-B and ePassport

Utilizing class leading Industrial design, TSL develops products from concept through to high volume manufacture for Blue Chip companies around the world. Using the above technologies TSL develops innovative products in a timely and cost effective manner for a broad range of handheld devices.

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