

Multiplex Station Manager | Maximizing value proposition with end-to-end Retail Automation



Fuel retailing is at industry crossroads, with the changing macroeconomic climate, increasing volatility in demand and soaring customer expectations. Forecourts are transforming into major hubs of business, delivering value beyond fuel and convenience sales. But the segment is beset with challenges related to visibility, inventory and quality monitoring and management.

To improve net present value and unlock more from adjacent value pools, fuel retailers need complete control and visibility over operations. Digitally-enabled and data-driven levers can maximize value from the core business, improve utilization of forecourt real estate and help build a distinctive and holistic value proposition.

Next-Gen Wireless IoT-enabled Fuel Station Automation

Multiplex Station Manager offers end-to-end automation of fuel stations for real-time visibility and complete control over entire operations. The solution covers every major component of a fuel station—from dispensers, tanks, ATG probes, price polls to wet stock management and delivers optimum value proposition through wireless forecourt automation, centralised monitoring system and Cashless / Cardless AVI system integrated with hand-held solution to cater to fleet customers.



Fuel Station Automation | Simplicity, Visibility, Efficiency

The Multiplex Station Manager is a cloud-based Fuel Station Management and Automation Solution that provides real-time data visibility on sales, wet stock inventory, equipment monitoring and various quality parameters to seamlessly manage all fuel station operations in an optimized way.

The Multiplex Station Manager offers



Wireless Forecourt Automation to deploy the Smart Service Station of the future



Centralized Monitoring System (CMS) and FuelSmart Mobile App to facilitate real-time data visibility and monitoring to seamlessly manage all operations and equipment alerts through different channels



FuelFleet, a fuel card management solution, to help fleet customers remotely monitor entire fleet fuelling and Attendant Tagging to eliminate manual intervention resulting in a quick Customer Fill Experience



Hand-held Terminal (HHT) to monitor and manage fuel station operations from the palm of your hand. With HHT, you can control and authorise dispensers, monitor and track wet stock and perform daily reconciliation, including closing shifts and printing shift summaries



Wet stock Management to gain a holistic view of inventory processes including fuel sales, tank gauge readings, pump totals and deliveries and manage stock with total accuracy. This system also provides a Secondary Distribution Information Hub that gives a 360° view of oil distribution, logistics, and operations.



RFID-based automatic vehicle and customer identification solution to allow cardless /cashless filling operations to cater to fleet customers



Real-time alert and alarm notifications to enhance visibility and control over on-going operations with a range of indicators such as Tank High Water, Tank Low Product, Tanker Decantation, Pump Testing, Pump & Tank Status (Online/Offline)

Forecourt Automation | Embedded Solution in a Box

Multiplex Station Manager offers a field-proven and complete wireless forecourt automation solution designed for secure fuelling, quick installations and easy upgrade of fuel stations for real-time visibility and control of entire operations.

With Forecourt Automation, businesses achieve



Quick and cost-effective installations

Robust, next-gen IoT-enabled wireless architecture for easy installation, eliminating the need for civil works



Single point of control at forecourt and back office - Eliminating the need for additional IT devices, such as PCs



Robust hardware with a range of interfaces - Solid state-embedded and industrial design to reduce downtimes and operation losses, with interfaces for fuel dispensing units, ATG probes, attendant tag readers, price polls, payment terminals



Built-in fall-back functionalities - Built-in battery backup for FCC safe shutdown, fall-back mechanism and instantaneous recovery from shutdowns for increased system uptime



Embedded solution in an enclosure - A secure wall-mounted enclosure with access control and user access tracking to house FCC, power supplies, ATG barriers and surge protection devices



Built-in web-based Back Office Application (BOS) - Intuitive back office user interface to capture, collate and analyse all sales and stock transactions digitally facilitating a range of standard reports and trends tailored to retail fuel station environments



Centralized Monitoring Solution (CMS) | For Complete Control Over Fuel Stations

CMS is a Head Office application that automates retail outlets and allows centralized management and monitoring of site data across the fuel station network. From every fuel dispenser transaction to wet stock inventory to quality parameters, the CMS digitally controls and tracks every activity at the fuel station.



Automated data collection on sales transactions, stock inventory, tank status, pump status, events and alarms from retail outlets for real-time analytics and decision making



Remote management functionalities of retail outlet closure / reopening, Pump Enable / Disable, Interlock Enable/Disable



Intelligent dashboards with hourly / weekly / monthly sales, stock and ullage, retail outlet connectivity, product-wise critical stock, price change status and price change exceptions, analytical reports



Tracking of Pump maintenance and repair through approval process and managing Pump password through CMS / FCC



Real-time alerts and alarms notifications as per business rules



Centralized price updates to network of retail outlets



Role-based access to stakeholders including dealer access for remote monitoring of the outlet operations



Comprehensive wet stock analysis and RO Inspection reports



Centralized campaigns, discount management across retail outlets network



Ready integration with ERP systems / third-party systems for product price push, TT receipts and transaction alerts to customers through SMS gateway



Rule-based interlock logics to bring transparency, discipline and ensure safety in operations with a range of indicators such as high tank water, low tank product, tank decantation, pump testing, etc.

Benefits for fuel marketing companies

- Centralized and integrated system to increase visibility across sales and inventory
- Accurate marketing insights with real-time data
- Better insights into sales and stock trends resulting in improved sales and ability to avert potential issues
- Efficient customer relationship management
- Efficient wet stock management, centralized pricing and compliance management
- Improved capabilities and services to drive speed and consistency
- Enhanced forecourt efficiency via predictive analytics

FuelSmart | Mobile App

FuelSmart Mobile App enables Oil Marketing Companies and their dealers to monitor operations of fuel stations on the go.

FuelSmart Mobile App gives instant and real-time visibility of retail outlet data to all stakeholders involved, from retail officers to dealers. The Mobile App empowers users to monitor day-to-day operations and manage and control fuel stations from any location.

The Mobile App has role-based access and provides essential support for sales managers, field officers, dealers on real-time monitoring of sales transactions, tank inventory and fuel pricing.

The app also proactively alerts users on site operational issues with range of indicators such as pump offline, high tank water, low tank product or other forecourt parameters giving users advance warning to keep the retail outlet running smoothly while saving precious time.

Key features of FuelSmart Mobile App

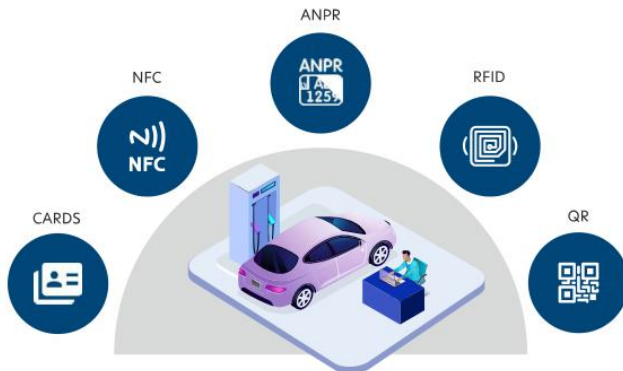
- Secured and role-based dashboards for Dealers, Field Officers, Sales Managers and C-level users to manage network of fuel stations & monitor site data
- Real-time visibility of sale transactions, tank inventory and equipment alarms
- Pump and tank online / offline status tracking
- Price updates management
- Intelligent sales & inventory trends with hourly/weekly/monthly views
- Pump- and attendant-wise sales monitoring
- Site connectivity status monitoring
- Pump maintenance and repair request and approvals
- Order bookings management (lubes and others)
- Invoice, receipts and credit note entries management



FuelFleet | Fuel Card Management Solution (FCMS)

FuelFleet is an industry-leading Fuel Card Management Solution (FCMS) that provides fleet owners, operators and managers a connected experience and interface to remotely monitor their entire fleet fuelling from a single dashboard. FuelFleet provides real-time data of vehicles, cards, RFID tags, fuel transactions, device alerts, notifications and audit trails. FuelFleet provides easy and innovative alternative to standard fleet solution as it includes mobile app and web-portal interface for key users, enabling them to monitor and control fleet limits, daily / weekly / monthly restrictions and the number of vehicles in the fleet.

The solution uses alphanumeric Mifare keypads for reading Mifare-based Fuel Cards and will utilize Android-based Hand-Held Terminal for reading NFC tags/ vehicle plate using ANPR and QR code stickers.



Hand Held Terminal (HHT) | Petrol Station In Your Palm

FuelFleet Hand-Held Terminal (HHT) is a petrol station in the palm of your hand. An all-in-one solution to manage fuel stations, FuelFleet HHT can operate standalone or can be used in connection with forecourt equipment. With FuelFleet HHT, companies can control and authorise dispensers, monitor and track wet stock and perform daily reconciliation, including closing shifts and printing shift summaries.

When integrated with FuelFleet Fuel Card Management Solution (FCMS), the HHT can be used to read NFC tags or vehicle plates using ANPR and QR code stickers on consumer mobile applications for initiating fuel transaction using digital payments, mobile wallets and post- or pre-paid methods.

Benefits

- Reduced fuel and operational costs, losses and optimal fuel distribution
- Automated operations with real-time insights about stations, fleet and fuel status
- Complete control of fuel usage by fleet while reducing fuel expenses, misuse and losses
- Flexible and scalable deployment, as well as straightforward interfaces with third-party applications
- Collection and management of pump transaction data
- Contactless fuelling through scanning of vehicle number plates
- Secure and portable equipment to reduce cash management challenges
- Faster, easier and smarter transactions



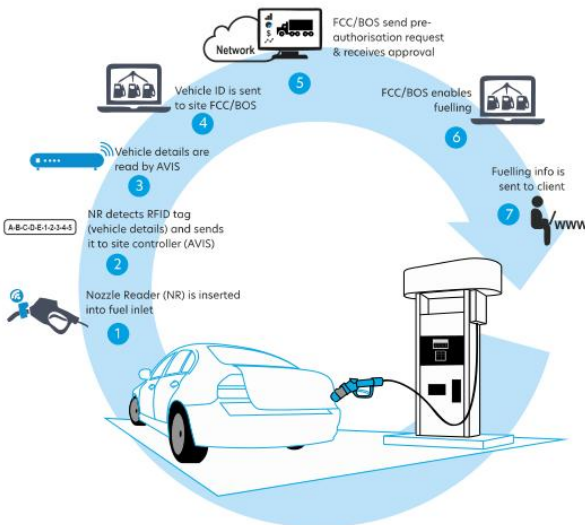
e-Fuel | RFID-based Vehicle Identification for Fleet Customers

e-Fuel is a new-age solution to automatically identify vehicles (AVI) and customers through RFID technology to deliver contactless refuelling and payment experience, bringing in efficacy in fuel management.

e-Fuel offers security, convenience, transparency and speedy payment settlement making it the smarter way of fuelling for fleet customers and ensuring the right amount of fuel is dispensed.

e-Fuel can be integrated with our Central Monitoring Solution (CMS) where Oil Marketing Companies can manage their fleet customers, contracts, limits and restrictions for every vehicle, including

- Setting fuelling limits per day / week / month in a specific station / region and allowing fuelling only on specific days of the week
- Controlling fuel usage while reducing fuel expenses, misuse and losses and preventing fuel fraud by fuelling of authorized fleet vehicles only
- Building new revenue streams and understanding customer buying behaviours
- Automating operations with real-time insights on fleet and fuel status
- Generating standard and advanced reports on vehicle usage and consumption
- Sending alerts on unusual behaviour and fuel consumption
- Reporting on odometer and engine hour readings for effective maintenance scheduling



Benefits for station owners

- Reduced check out times and speedy transactions for a 'Quick Fill Experience'
- Returning fleet customers who benefit from faster fuelling and better control
- Near-zero manual intervention and contactless, hassle-free invoicing
- Automatic recognition of fleet vehicles
- Reduced fraud and pilferages and complete cash control
- Ability to provide targeted customer offerings (discounts, account types, etc.)

Benefits for Fleet owners

- Zero fraud and pilferages by ensuring right fuel quantity goes into fleet vehicles
- Automated reporting with elimination of manual back-office tracking
- Simplified fuelling process for fleet drivers
- Automated collection and reporting of vehicle / engine data

Why Station Manager?

- Easy installation with robust hardware and next-gen IoT-enabled wireless architecture, eliminating the need for civil works
- Near-zero manual intervention for a 'Quick Fill Experience'
- Efficient customer relationship management
- Real-time data visibility and control of entire retail operations
- Accurate marketing insights
- Transparency and control over all facets of retail outlet operations
- Efficient wet stock management and monitoring
- Better Inventory control and supply chain management with audit and compliance
- Centralized price change and compliance management
- Better insights into equipment alerts and alarms to avert potential issues
- Enhanced forecourt efficiency through predictive analytics
- Improved capabilities and services to drive more speed and consistency
- Operational transparency and labour cost-savings
- Safety, transparency and discipline from audit control and better reporting
- Elimination of frauds and pilferage



About us

Established in 1999, Bahwan CyberTek (BCT) Group is a global provider of digital transformation solutions in the areas of Predictive Analytics, Digital Experience and Digital Supply Chain Management and has delivered solutions in 20 countries across North America, the Middle East, Far East, Africa and Asia.

Driving innovation through outcome-based business models, proven and powerful IP solutions, BCT is a trusted partner for over 1000+ customers, including Fortune 500 companies. With strong capabilities in Digital Technologies, BCT has over 3000 associates with technical and domain expertise, delivering solutions to the Oil & Gas, Telecom, Power, Government, Banking, Retail and SCM / Logistics verticals. With a focus on joint innovation, BCT has partnered with leading global technology organizations such as Oracle, IBM and TIBCO to deliver differentiated value to customers. BCT is recognized at CMMi level 5 and is an ISO certified organization.

For a demo of Multiplex, please write to SALES-DSCM@bahwancybertek.com

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