



Case Study

Taylor Oil

Total Meter Services, Inc.

August 20, 2007

- ▶ Taylor Oil was investigating a solution to help bring new efficiencies to their equipment refuelling operation. Taylor Oil needed to eliminate the clutter of paperwork and streamline accounting processes. Taylor Oil implemented the handheld technology of the TMS6000M.

TMS6000M

Mobile Solution

“Scan and Fuel technology”



Case Study – Taylor Oil

Summary

Taylor Oil was investigating a solution to help bring new efficiencies to their equipment refuelling operation. They needed to eliminate the clutter of paperwork and streamline accounting; specifically Taylor oil was seeking to improve the method in which their customers are billed for the daily deliveries of fuel to fleet equipment. Taylor Oil was interested in a handheld automation solution that would be user friendly to the drivers in the field and to the accounting personnel at the main office.

Customer Profile

TAYLOR OIL CO., INC.

For the past 30 years Taylor Oil Co. has provided direct to equipment fueling on job sites. Taylor Oil trucks visit the job site on a predetermined schedule and time, to fill all of equipment, tanks and/or vehicles. Many of the Taylor Oil trucks carry both on and off road diesel so that they can fuel all of the customer's equipment, not just the construction machinery. Taylor Oil has fueled sites consuming as much as 10,000 gallons per day, and as little as 50 gallons per day. Their services are available throughout the Northeast.

Business Problem

Overview

Taylor Oil Co. operates an equipment refueling operation. Their trucks start the day by filling up at Taylor Oil's own bulk plant. The daily workflow for the driver entails filling up the delivery vehicle with fuel, following the dispatch schedule, and delivering fuel to the fleet equipment and vehicles owned by Taylor Oil's customer base. The driver used a clip board based paper system to determine daily delivery route, track delivery meter readings and write down customer billing information. The daily paperwork was then handed over to the accounting department to decipher and enter in their billing system. The paper trail was getting too long to handle and deficiencies in timely billing were becoming apparent. The customer base of Taylor Oil Co. was also asking for detailed reporting of daily deliveries as well as additional information such as Fleet mileage and consumption. The current paper-based system had become cumbersome.



Objectives

Taylor Oil Co. wanted an affordable, paper-less automation system that was user-friendly for the driver and the accounting department. The system needed to be customizable and economical. The solution was not to alter the business process already in place, but enhance it with cutting edge technology that would boost productivity and efficiency. In 2005 Taylor Oil began searching for one solution that would be able to alleviate the paper trail, digitize the dispatching of drivers and provide a time clock system based on the driver's workflow.

Choosing the right partner

Senior Executive Management for Taylor Oil Co. approached Brian Savage of Petro Chem Technologies for assistance with finding the right partner for this project. Brian Savage played a pivotal role in placing the TMS6000 Terminal Management Solution in the Taylor Oil bulk plant, so it was a natural fit for Taylor Oil to choose Total Meter Services, Inc. to supply the Mobile truck delivery system. The TMS6000 and the TMS6000M work in conjunction with each other to provide total reconciliation. Taylor Oil Co. was already familiar with the work ethic and customer centric stance that Total Meter Services, Inc is known for, so the choice was a natural one.

Solution

The solution was delivered to Taylor Oil Co in the form of a Mobile PC embedded software solution with a database backend and HTML Web-based user interface. The first phase of the process was to determine how the TMS6000M was to be utilized. This is a needs analysis interview. TMS describes this as "A day in the life of a Driver". Key components of the needs analysis entailed understanding the Synchronizing Methodology to be deployed. TMS6000M offers real-time communication with a host computer using 802.11G/B wireless networking protocol from within the company's home base, cell phone (GSM/GPRS and CDM/1XRTT) technology while on the road for immediate data capture or daily batch recovery using a docking station. The TMS6000M software searches for new update through the use of the TMS Version Control Module to download and install the latest version of the software. This ensures the end user is operating the most advanced solution for their needs.



Solving the problem

The TMS6000M eliminated the paper-trail that was left by the existing clipboard system. The TMS6000M also freed up time in the daily routine of both driver and accountant. Before implementation, Taylor Oil dispatched two operators per truck each day to handle the daily workload. One operator was responsible for the physical delivery of the fuel while the second individual would monitor the preset and annotate the fueling data. With the deployment of the TMS6000M Scan and Fuel Technology the workload is now manageable by one operator only.

The Technology

The technology rests on a Windows infrastructure, both Desktop and Mobile PC based. The reporting and administrative management of the system is carried out through web-based application that facilitates that ability to view and manage the system from any desktop or laptop PC with live internet access.

- PocketPC embedded language programming.
- Mobile Cellular
- 802.11 Wireless networking
- Bar Code, signature pad, RFID, Imaging
- Wireless handheld Fuel and inventory delivery system with synchronized data transmission to host server for Web based managerial reporting capability

Key components

- **Trucks**
 - 16 Fully Automated Trucks
 - 16 Manual Data Entry Trucks
- **Hardware**
 - Intermec Ruggedized Handheld PC
 - Liquid Controls LCR
 - TMS6000M Wireless Box
- **Software**
 - TMS6000M
- **Office Components Software**
 - TMS6000m Host
 - SQL Server
 - FTP Server
 - Data Export Interface with DM2



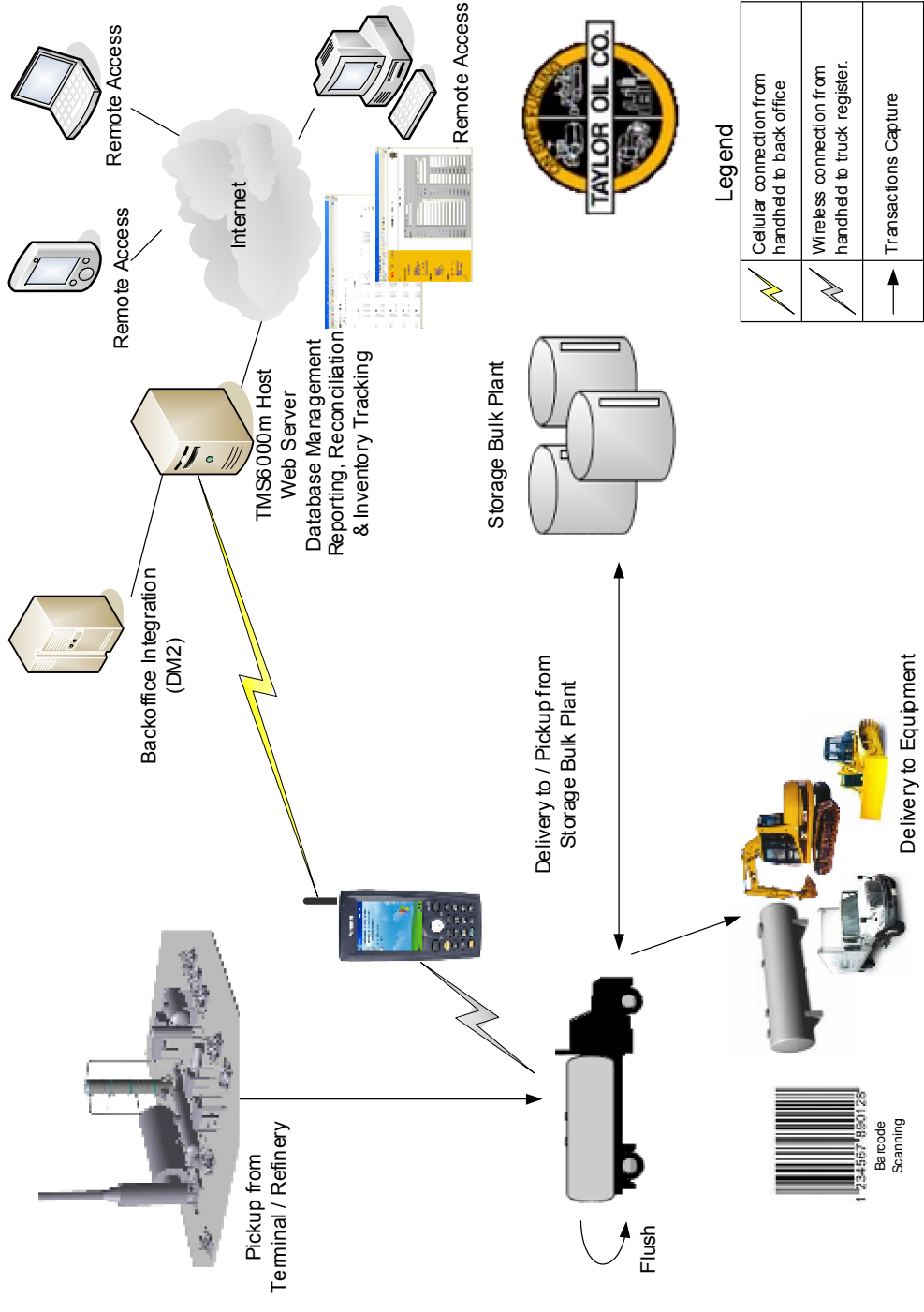
Results and Benefits

Mark O'Leary, VP Operations for Taylor Oil NE stated "The inclusion of TMS software (TMS6000, TMS6000M) into our business process, has streamlined how we do business. The simplicity of the TMS6000M handheld system allows our drivers to be more efficient and improves customer relations; the hosting data capture and web reporting is extremely convenient for our office staff; and the direct exporting of data into our DM2 billing system has reduced our billing cycle, operating costs, and increased the productivity of our staff. TMS 24/7 support is the best we've encountered! TMS goes above and beyond the call whenever we have a question. I highly recommend TMS to any company (outside of my area!) that has a fleet of fuel delivering vehicles and wishes to reconcile every drop of fuel and improve their billing process."

Lessons Learned

TMS encountered a few unique requirements working with Taylor Oil that served to enhance the operation of the TMS6000M. Specifically, Taylor Oil needed the ability for drivers to add new equipment and related bar code data to the database at any time. In the business of equipment refueling, a driver may encounter a piece of equipment that was not already entered in the master database. TMS created a module that will accept the addition of a new barcodes, which the driver will carries in the truck, and add this equipment to the master database upon syncing. A failsafe was put into place that flags this new equipment for review by the administrator before a final update to the database takes place. In addition to the requirement for new equipment, Taylor Oil also required that truck information such as Mileage and Fuel consumption related to the fleet vehicles it is contracted to service also be captured. This data is then visible to Taylor's customers through the third party access module created by TMS. In the end, TMS remained flexible to the ever changing demand for features and delivered the changes promptly.

Case Study – Taylor Oil – TMS6000M Mobile Solution



TOTAL METER SERVICES INC. 150 CREDITSTONE ROAD VAUGHAN ONTARIO CANADA L4K 1P2 PHONE: 905-668-7011 FAX: 905-668-7010	TITLE	TMS6000m Mobile - 7b.ylor.01
	DESCRIPTION	
	DATE	2007-08-01 GR
	DWG	TMS000 018x.v sd