

Success Story

A case study about exceptional value we provided to our clients



Full Life Cycle Development

OVERVIEW

A large agency operates a nationwide fleet of over 200,000 vehicles. In the past, drivers used oil company credit cards to pay for fuel, oil, repairs, and other operating expenses. Invoices were processed and paid manually, which was slow, expensive, and prone to errors. The agency decided to replace all the oil company credit cards with cards from one company and automate the process of payment processing and reporting. The agency asked Johnston McLamb to develop the new system, and we had the first version successfully running in production within a few months. Since then, the system has enabled the agency to greatly streamline payment processing, recoup over \$30 million in exempt fuel taxes, and detect fraudulent credit card purchases. The fleet card system has won a prestigious "Top 5" Excellence.gov award.

JOHNSTON MCLAMB'S FULL LIFE CYCLE DEVELOPMENT PRACTICE HELPED THIS AGENCY:

- Rapidly implement a system to streamline credit card payment processing
- Take advantage of prompt payment discounts
- Get fleet operation costs under control
- Recoup millions of dollars in fuel taxes that previously were lost
- Detect and report on possible fraud and misuse of credit cards

BACKGROUND

Managing a fleet of over 200,000 vehicles is a large, complex task that requires a high level of automation to be performed efficiently. The agency that was managing this large fleet with virtually no automated systems realized that they needed help, so they engaged Johnston McLamb to provide a solution. The challenge was significant, partly because of the very large scale and partly because there were so many problems to be solved. The agency was using credit cards from 37 different companies; over 175,000 transactions were charged to those credit cards each week; manual processing of paper invoices was slow, inefficient, and error-prone; the agency was exempt from many taxes on fuel but was not recouping millions of dollars of those taxes; and no one knew if there was any fraud or abuse occurring with the credit cards.

GETTING STARTED

Johnston McLamb began by meeting with the client to gain an understanding of the business processes and requirements. We learned that responsibility for managing fleet operations was delegated to over 16,000 people located in all 50 states and U.S. territories as well. All of them needed access to the credit card transactions for the vehicles under their supervision. Fortunately, the agency had decided to replace the credit cards from all the various oil companies with cards from just a single vendor. That vendor agreed to provide a weekly file of transactions to the agency. Due to funding and time constraints, it was agreed that the fleet management system would have to be developed in phases over a relatively long period of time. However, the client wanted the first phase implemented within two months, so we had to respond quickly.



RAPID APPLICATION DEVELOPMENT

Even though the initial version of the fleet management system had to be developed very quickly, it had to be designed for scalability and seamless expansion into new functionality in the future. We designed the overall system architecture, database schema, and web site architecture based on estimates of current volumes and anticipated growth of both transactions and users. We worked closely with the client to develop storyboards that illustrated how users would interact with the system. We also helped the agency develop specifications for the hardware that would be needed, then configured that hardware and installed the necessary database software.

The primary objectives of the initial version were:

- Load the weekly file of credit card transactions
- Assign the cost of each transaction to the proper cost center and G/L account within the agency
- Automatically send payment authorizations to the accounts payable system to pay the credit card vendor
- Provide each vehicle manager with both summary and detailed reports about the transactions charged to their vehicles

The cost center to which a vehicle's transactions are charged is determined by the physical location of its "home base". Since vehicles are reassigned to new home bases from time to time, we developed an interface to the vehicle inventory system to keep the cost center assignments up to date.

Another challenge was the fleet card system's security requirements. First, each of the 16,000 users had to be authorized to access the system. Next, each vehicle manager had to be restricted to viewing transactions for his or her cost center only – none could see other cost centers. But higher level managers had to be able to view transactions across cost centers. Furthermore, as people moved to other locations or were promoted, their security authorization had to change appropriately. We developed other interfaces to the agency's centralized security system to accomplish this.

Within two months, we finished development, successfully completed customer acceptance testing, and moved the system into production. That same week, the first transaction file from the credit card vendor arrived and was successfully loaded into the database. At that point, the entire user community was able to view the transactions for which they were authorized. They quickly began using the new system without needing any training or documentation because the user interface was so simple and intuitive.

The automated payment authorization feature proved to be another major benefit. It eliminated the costly process of manually handling paper invoices and enabled the agency to take advantage of prompt payment discounts, saving tens of thousands of dollars and eliminating costly penalties for late payments altogether.

SYSTEM ENHANCEMENTS

After the initial version of the system was implemented, we developed additional valuable features. One feature involved the recoupment of state taxes on fuel. Most states will refund the tax to any tax-exempt organization that submits a valid claim. Each eligible state has its own application form, procedures, and filing schedule. Johnston McLamb developed routines to automatically create the tax recoupment claim forms for each state according to the state's filing schedule.

Another agency need was to institute procedures to guard against credit card misuse and fraud. With such a large volume of credit card transactions, it was difficult to know if all the transactions were legitimate. Johnston McLamb developed two enhancements to address this problem. The first was a reconciliation report that listed all the transactions for vehicles belonging to each vehicle manager. Anyone who charged something to the fleet credit card was required to get a paper receipt and give it to the vehicle manager. Then each week the manager would compare paper receipts to the transactions in the fleet management system and check a checkbox to indicate whether the transaction was accepted (i.e., matched the receipt) or disputed (didn't match the receipt or no receipt found). This enabled managers to keep track of transactions at a detailed level and quickly identify ones that were questionable.

A second major enhancement was the development of a module to identify potentially fraudulent transactions. Every transaction is subjected to 18 different tests that GSA had identified as best practices for fraud detection. The module flags any transaction that fails even one of the tests and notes the probability of fraud (low, medium, high). Fleet managers are responsible for reviewing all such transactions and taking appropriate action. As a result, many fraudulent transactions were identified and the agency was able to take action against the offenders.

REALIZING THE BENEFITS

The benefits of the fleet management system have been substantial. To date, over \$30 million in fuel taxes has been recovered. Costs of manual processing of credit card payments have been eliminated, and the agency takes advantage of prompt payment discounts. Fraud and misuse is rapidly detected, and undoubtedly have been substantially reduced through deterrence. The Industry Advisory Council's (IAC) eGov Shared Interest Group, in partnership with E-Gov and the Federal CIO Council, selected the system as a "Top 5" award winner within the Excellence.Gov awards program.

Contact Johnston McLamb at jmsales@johnstonmclamb.com to learn more about how our Full Life Cycle Development practice can bring these same benefits to you.