

Case Study

Auto Dealership Accelerates Sales with RFID

Company Description

Performance Analytics, Inc. (PAI), a privately-held company based in Palo Alto, California, developed its electronic lockbox, *intelliLot™*, to provide auto dealerships across the country a more streamlined and effective sales tracking and accountability system. *intelliLot* was developed when several large dealerships approached PAI about creating a key-tracking solution that would simplify vehicle access for test drives, while automatically capturing specific customer interest by vehicle and individual sales productivity, in real-time.

Operations Data

- Based on input from insurance companies, security monitoring services and loss prevention specialists, PAI designed *intelliLot* to offer both the convenience of lockboxes and the security of a centralized electronic key system while capturing every customer demonstration on the lot in real-time. Armed with actual sales activity details by vehicle the dealer can quickly eliminate low interest vehicles and focus sale management attention on improving individual sales person productivity. The result: increased dealership inventory turns, sales productivity and profits.
- *intelliLot* provides quick and easy access to vehicles during the sales process. Each car is outfitted with a lockbox that holds the ignition key and key-fob. To access the key, the sales representative swipes a personal, radio frequency identification (RFID) card and enters a PIN on the lockbox's keypad.
- *intelliLot* successfully merges new and proven technologies—wireless communication, solar charging circuits with an integrated battery system, RFID, wireless mesh networking, web-based applications software, and Dealer Management System (DMS) interfaces—into a unique, practical hardware and software solution.

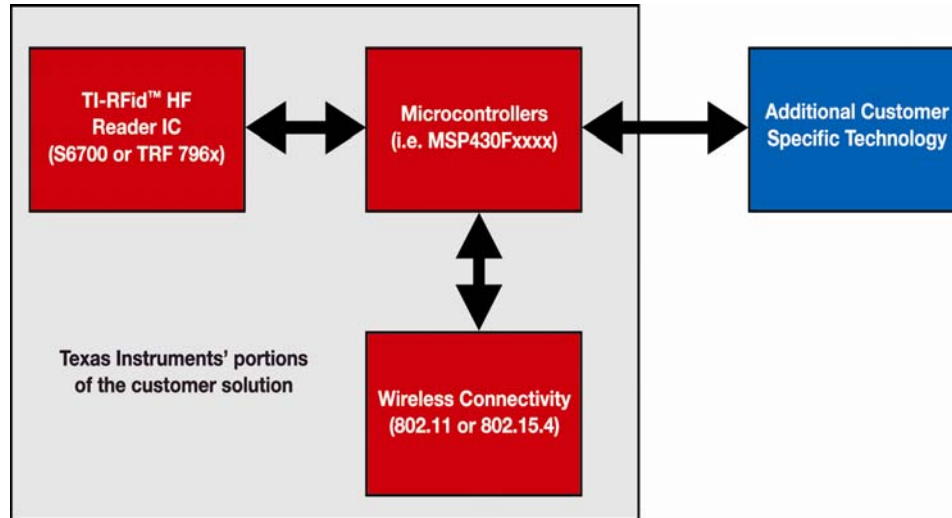
The Problem

Until February 2006, The Bob Lewis Automotive Family dealership, based in the San Jose, California, had relied on a traditional manual system that required salespeople to retrieve car keys from a main office or from lockboxes throughout the car lot. Often potential buyers were left waiting for an unacceptable amount of time, and there was no way for the dealership to track which salesperson took what vehicle and when.

Steve Lewis, president and partner of Bob Lewis Automotive Family, said the inconvenience and delay caused by retrieving keys from remote locations decreased sales by 10 percent. "If salespeople have to search for vehicle keys or retrieve them from a central location, they're spending less time with a customer, and it's hurting sales," Lewis said.



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The Solution

Enabled with RFID and ZigBee wireless technologies, *intelliLot*'s speed and convenience helps salespeople at The Bob Lewis Automotive Family dealership increase the number of test drives, boost sales and improve inventory tracking and turnover. PAI turned to Texas Instruments (TI) for RFID readers and transponders, and enlisted Firetide, a privately-held technology company based in Los Gatos, Calif., for a wireless mesh network to connect data from the boxes to the *intelliLot* web based management system.



Each lockbox, large enough to hold a vehicle's ignition key and key-fob, is equipped with a 16-bit processor and RFID reader/antenna. The key is attached to a plastic one-inch-by-two-inch electronic key-tag that contains TI's Tag-it passive 13.56 MHz RFID tag, compliant with the ISO/IEC 15693 standard. Salespeople gain access to each lockbox attached to the car's window through a plastic card embedded with a similar TI 13.56 MHz RFID tag encoded with a personal identification number.

At the beginning of each work day, salespeople present their cards to an RFID reader in the main office. The reader validates each person's access privileges for that day and sends the ID number to all the vehicles' lockboxes. To gain entry to the boxes, salespeople insert their cards into the box and enter a personal identity number or PIN into a keypad. A "special tone" indicates that the box may be opened. Solar powered transceivers located on the lot provide vehicle location information and relay the salesperson's name, date and time the vehicle was accessed via ZigBee and cellular data connections.

The Bob Lewis Automotive management team can access the data from any web-connected PC or cell phone on a password-protected web site created by PAI. The team can readily track

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who has a vehicle, how long they have it, and how often (if at all) a vehicle is test driven. Lewis uses the information to determine which cars are sitting on the lot without test drives and which vehicles are test driven frequently, but not purchased.

"The *intelliLot* system fully automates the information process, providing the dealership with detailed data on the performance of their sales

personnel and the movement of cars on the lot," said Dennis McGinn, CEO of Performance Analytics Inc. "The system also identifies cars that are not getting many test drives so the dealership can immediately adjust its pricing and promotional strategy on a per vehicle basis."



About Performance Analytics, Inc. (PAI), founded in 2002, is a privately-held California-based company with backing from business executives in automotive, software, communications and finance. PAI senior management averages more than twenty years direct experience in consumer products and decision management solutions for a broad range of industries including: software, automotive, financial services, manufacturing, and retail. For more information, visit www.intelliLot.com

About Texas Instruments RFID Systems

Texas Instruments is the world's largest integrated manufacturer of radio frequency identification (RFID) transponders and reader systems. Capitalizing on its competencies in high-volume semiconductor manufacturing and microelectronics packaging, TI is a visionary leader and at the forefront of establishing new markets and international standards for RFID applications. For more information, contact RFID Systems at 1-800-962-7343 (North America) or 214-567-7343 (International), or visit the Web site at www.ti-rfid.com.

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