

Case Study

Vehicle Tracking - Dat Autohus



The transparent „AUTOHUS“

A case study about how a custom fit solution based on active RFID technology can provide ultimate visibility in automotive vehicle tracking.

The Client

„Dat Autohus“ was founded in 1995 and is one of Europe's largest used vehicle trading companies. Located near Bockel, Germany, close to highway A1 between Hamburg and Bremen, the expansive area is as large as six football fields and is home to 1500 used vehicles.

The Challenge

Busy operations, diverse offerings and time critical tracking of cars

The demand is high. The reception area of “Dat Autohus” reminds one of a busy airport check-in. People from all over Germany, many of them with number plates under their arms, flock to the facility in search of a new vehicle. Most have already visited the Dat Autohus website and are now ready to purchase a specific automobile. The potential buyers are now looking to view; test drive then if all goes well, purchase the vehicle to take home.

The “Dat Autohus” team organizes approximately 50 test drives a day. Considering the large size of the car lot, locating the vehicles for these test drives is not an easy task – and the time investment in locating each car is a critical factor in overall efficiency and customer satisfaction.

Efficiency behind the scene

An additional 40 to 50 vehicles arrive at “Dat Autohus” on a daily basis. Once received, each automobile is subjected to a technical inspection, followed by a service routine that often includes a change of tires, and the repair of possible damages.

The Challenge

The requirement: Reliable and up to date information about the vehicles' condition and location have to be made available.

IDENDEC SOLUTIONS partnered with noted software developer Silverstroke AG, a subsidiary of Cirquent GmbH. The partnering companies were faced with the challenge of developing a custom solution that would meet Dat Autohus' needs for enhanced efficiency and information access. Three individual platforms had to be considered: the dealership's existing ERP system, IDENDEC SOLUTIONS' RFID system automatically providing relevant vehicle information, as well as a new application for processing and displaying all absorbed field data.

The Solution

Upon receiving and reviewing arriving automobiles, an active RFID transponder attaches to a car beneath the headrest. Effectively compared to a routing slip, the transponder stores all relevant information about each individual step of the car's life cycle from check-in, to test drives, all the way to the final sale to the client. Fixed Active RFID readers are positioned at key points within the facility such as the vehicle check in area, the car wash, in the repair shop, on the parking lot or at the exit gate. The readers automatically communicate with the vehicles active RFID transponders obtaining and tracking the most recent information.

The process of locating vehicles in the expansive area is managed by handheld RFID readers with a GPS receiver. By driving through the entire car dealer lot, all vehicles will be registered by the handheld reader and associated with a unique GPS location. The mobile readers forward the vehicles' condition and location information to the main software system, generating a user-friendly set of information on each vehicle.

Customer Benefits

Expectations exceeded

The main objective was to develop a system that assisted the Dat Autohus team in the more timely location of vehicles within the expansive lot. It quickly became apparent that this solution delivered significant and unanticipated value that easily surpassed Dat Autohus' expectations.

- A car's exact location can now be determined with only a view clicks – providing considerable operational time savings and increased customer service.
- This solution enables the highest degree of visibility and business process optimization regarding arriving cars throughout their preparation process.
- Inventory per click of a mouse: The solution provides a permanent inventory. Amongst other benefits this creates better accountability for financial institutions who finance the vehicles.
- The active RFID transponder also records how many times a car has been test driven. This allows for further analysis, determining which makes or models are of high interest.
- The process of managing up to 2.500 cars is a time consuming, labor intensive task. Increased process visibility throughout all stages of the vehicles journey while on the dealer lot make certain that the vehicles keys are returned following a test drive.



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