



Ford, Hewlett-Packard Using Coffee Stops, Big Data to Better Manage Fleets and Personalize Employee Drives

- Ford and HP Fleet Insights experiment analyzes information from daily driving to lead to more efficiently managed fleets, car sharing and personalized driving experiences
- Experiment gathered information from national HP fleet vehicles and HP employee volunteer drivers around the U.S., learning HP drivers share similar coffee, airport parking and refueling habits, which could be leveraged to reduce operating costs while improving convenience and services
- The Fleet Insights experiment is one part of the [Ford Smart Mobility plan](#) aimed at better understanding consumers' mobility needs around the globe

Ford Motor Company engineers have completed a real-world driving experiment with HP, one of the world's largest technology companies, discovering which commuting commonalities could provide future breakthroughs for better managing fleets, personalized services and recommendations for individual drivers.

Using [HP's Big Data Discovery Experience Services](#) and the [HP Haven](#) big data platform, the engineering team gathered data and analyzed it to determine possibilities for lowering operating costs and optimizing underutilized vehicles for fleets as well as personal driving.

Among the observations of the experiment: Regardless of location, most HP drivers grabbed coffee at the same national coffeehouse and refueled with the same brand of gasoline, while traveling employees often left vehicles unused at the airport for days.

While it's no surprise road-tripping employees stop for coffee, data analysis about commutes and driving routines could lead to greater economies of scale for company fleets and new solutions for optimizing underutilized vehicles.

"The Fleet Insights experiment is one of the first steps to better understand and learn about how driving behavior is changing," said Marcy Klevorn, Ford vice president and chief information officer. "Fleets could see operating costs lowered through national buying contracts and improved utilization and maintenance, while individual drivers could receive coupons or create cooperative pools to share unused vehicles."

The Ford Fleet Insights experiment included HP fleet vehicles that were equipped with wireless sensors plugged into each vehicle. Ford data scientists and IT leaders used the [HP Vertica](#) analytics engine, part of the HP Haven platform, to explore patterns and multiple dimensions of fleet driver activity. Also, each driver could access their data using a custom smartphone app to recall trip details, if needed.

"HP and Ford share a common vision around bringing together data, mobility, and analytics to explore new ways to deliver better customer experiences, new revenue streams, and lower fuel and maintenance costs in the automotive industry," said Martin Risau, senior vice president, Analytics &

Data Management Practice, HP Enterprise Services. “The results of this experiment can help unleash improvements for business operations for fleet management and personal driving experiences.”

Observations during the experiment included:

- Regardless of location, most drivers visited the same national coffee house and refueled with the same brand of gasoline
- Traveling employees often left their vehicles unused at the airport for days. These vehicles could be utilized more effectively by nearby drivers
- 70 percent of trips took place during weekdays and typical trip distances were 13 miles or less

Trips fell into four groups:

- City block driving (34 percent): Involved frequent direction changes, driving near the speed limit, idling at stoplights with short distances.
- Freeway driving (21 percent): Involved few driving direction changes with large deviations from the speed-limit depending on traffic, and long trip durations and driving distances with less stop and go than City Block Commute.
- Non rush-hour Driving (29 percent): Short trip duration and short-distance with less stops and idling
- Rush-hour driving (16 percent): Short trip duration and short-distance with frequent stops and idling during peak drive hours

The Fleet Insight experiment data collection phase was completed in June after gathering information from nearly 100 vehicles. Data analysis continues through the end of 2015.

About Ford Motor Company

Ford Motor Company (NYSE: F) is a global company based in Dearborn, Michigan, that is committed to helping build a better world, where every person is free to move and pursue their dreams. The company's Ford+ plan for growth and value creation combines existing strengths, new capabilities and always-on relationships with customers to enrich experiences for and deepen the loyalty of those customers. Ford develops and delivers innovative, must-have Ford trucks, sport utility vehicles, commercial vans and cars and Lincoln luxury vehicles, as well as connected services. Additionally, Ford is establishing leadership positions in mobility solutions, including self-driving technology, and provides financial services through Ford Motor Credit Company. Ford employs about 182,000 people worldwide. More information about the company, its products and Ford Credit is available at corporate.ford.com.