WHERE THE GLOBAL FLEET COMMUNITY CONNECTS
JUNE 4-6, 2019
HILTON MIAMI DOWNTOWN
MIAMI, FL
Managing The Data-Driven Fleets Of The Future

RUSTY BARRON
Vice-President
Shell Fleet Solutions North America

Session Sponsored by

Volkswagen
Shell by the Numbers

- **86,000**
  Average number of people we employed

- **$35.6 billion**
  Cash flow from operating activities

- **30 million customers**
  Served every day through 44,000 Shell-branded retail stations

- **33.2 million tonnes**
  LNG liquefaction volumes

- **70+**
  Number of countries in which we operated

- **50%**
  Share of our production that was natural gas

- **9 billion**
  Litres of biofuels blended in the petrol and diesel we sold

- **3.7 million**
  Our production of crude oil and natural gas, in barrels of oil equivalent a day

- **$922 million**
  Spent on research and development

- **$111 million**
  Spent on voluntary social investment worldwide

- **66 million**
  Tonnes of LNG we sold

- **1+ million tonnes**
  Amount of CO₂ captured by Quest CCS facility in 2017
Shell is the largest global provider of solutions for business fleets.

**#1**

Shell cards accepted in >200,000 roadside locations worldwide

>7million

Active Shell cards

**2 million**

Customers served every day

- Digital offers & mobility services
- CO2 Offsetting
- Car/ride sharing & leasing
- Quality & low emission fuels
- Mgmt. info, advanced controls & security

Global Fleet Conference

Brought to you by Automotive Fleet, Work Truck, Fleet Europe, Global Fleet, The Executive Network
Managing Data-Driven Fleets of the Future
The Data-Driven Fleet of 2025

Cars and trucks will be big spenders
With a built-in e-wallet and their own blockchain smart contracts, cars will negotiate and pay for fuel, parking and other amenities. 15% of all fleet transactions will be blockchain transactions. ²

Vehicles will fix themselves
With over-the-air software updates, vehicles can optimize performance and fix problems on the go. This will cut maintenance costs up to 15%. ¹

Fleets will do their own paperwork
Fleet management software will log data and complete admin tasks automatically; tasks such as invoicing, driver scheduling, delivery optimization and emission offsetting. ¹

The vehicle will be a connected device
Up to 200 sensors will feed data back to fleet management software, helping to create a $2 billion annual market in automotive data. ¹

Mechanics will find faults faster
With sensors continually monitoring all systems, the car will be able to tell mechanics where to look for a fault, reducing repair costs by between 11% and 15%. ¹

Brokerages will maximize vehicle utilization
AI-driven freight brokerage apps will help keep drivers on the road and vehicles utilized at all times, rather than waiting for the next loads. This will reduce empty mileage by up to 10%. ³

SOURCES
¹ Automotive Data Monetization to Reach $33 Billion in Opportunities for OEMs by 2025,” 22 February 2018, Frost & Sullivan.
² Blockchain in the Global Commercial Vehicle Industry, Forecast to 2025, Frost and Sullivan.
Trucks will learn to love company

Using GPS and telematics, trucks will travel in each other’s slipstreams, reducing fuel and emissions up to 16%.²

Customers will know driver by sight

Integrating systems with fleet telematics will make it easy to tell customers where their driver is, when they will arrive and send them a photo of them before they arrive.

Drivers can cover same ground in ≤30 minutes

Drivers informed by telematics and AI-powered route software will be able to cover the same daily miles as today, in around 30 minutes less time.¹

There will be less overtime

Smart mapping, freight brokering and other data technologies will help drivers save up to 30 minutes a day and reduce the need for overtime by as much as 15%.¹

Drivers will use less fuel

AI assistants and telematics will help you coach drivers to be more fuel efficient, reducing petrol and diesel costs by up to 35%.²

Computers will help drivers drive smarter

With sensors and AI capturing driver styles, fleet managers can help their drivers learn how to be safer and more efficient, cutting fuel costs by up to 35%.¹

Get there faster without checking a map

Real-time mapping will help European drivers save up to 1.5 million gallons of fuel every year by being faster and more efficient.¹

The Plugged-In Driver of Tomorrow

Sources:
¹ Automotive Data Monetization to Reach $33 Billion in Opportunities for OEMs by 2025, 22 February 2018, Frost & Sullivan.
² "What is truck platooning?" 2017, European Automobile Manufacturers Association.
Big Data
Connect To Strategic Initiatives
Telematics
More Than Dots On A Map
Data Examples

SAFETY
Detect Driver’s Seat Belt
Speeding
Rule Violation
Seatbelt Usage Detection over User-Defined Speed
Aggressive Driving (acceleration, braking, cornering)
Detect Impact Events
Detect Towing Events
Accident Data Memory Buffer

FUEL SAVINGS
Total Fuel Used
Total Idle Fuel Used
Fuel Level Input
Idling
High RPM

TRACKING
Driving in Reverse
Internal GPS Antenna
Position Instantly Available After Cold Start (ephemeris)
Installation Record (date/time/location)
Device Tampering/Removal Detection
Intelligent Ignition Detect
On-Device Memory for Out-of-Coverage
False Positive Filtering

MAINTENANCE
Voltage Monitoring on Crank (electrical battery health)
Battery Voltage Monitoring (battery drain)
Self-Calibrating Accelerometer
Automatic OBD/CAN Protocol Detection
Automatic VIN Readout
Estimated Odometer and Engine Hours
Actual Engine Hours, Engine Road Speed & Odometer
Shell Telematics Example
*We Make Data Work Harder For Your Business*

**PHARMACEUTICAL**
(European Union)
800 Passenger Car Fleet

**OBJECTIVES**
Improve Driver Safety
Reduce Accidents

**PRODUCT FEATURES**
Drive Behavior Insights
Shell Telematics Example

THE RESULTS

ACCIDENT RATE

\( \downarrow 27\% \)

FUEL SAVINGS

\( \uparrow 4.4\% \)
Big Data

Like drinking from the fire hose
The Data-Led Approach
An ‘Industry Changer’

Platform integration
Data as revenue stream
Consolidation
What can fleets do today to stay ahead of the curve?
Prepare For The Future

Data Scientist
Software Integration
Data-Informed Driver Management

Data Privacy
Performance Optimization
Bringing It All Together
A United Fleet Industry
BIG DATA
UNITE ON DATA STRATEGY GOALS

- Scalable Systems
- Safeguards & Protections
- Common Standards
- Partnerships
- Training for Tomorrow
Practical Steps for Fleet Managers

Understand medium-term business goals

Match future fleet to right systems

Map vehicles

Start planning future fleet

Integrate and test solutions
Summary: Data Is Key

**WHAT**
What’s available?

**HOW**
How can it be used?

**WHO**
Staff development / solutions provider
DRIVEN BY DATA: MANAGING FLEET INFORMATION OVERLOAD
WHAT THE VEHICLE FLEET OF TOMORROW WILL RUN ON DATA AND HOW FLEETS CAN START PREPARING TODAY

SHELL FLEET SOLUTIONS
TOGETHER ANYTHING IS POSSIBLE

VIEW FULL REPORT
www.shell.com/drivenbydata