

DAIMLER

VRM Chrysler

Pass Extension
And
Backend Platform

Automated Vehicle Advisory (AVA) Project

Automated Vehicle Advisory (AVA) Project Business Case

- Communicate Directly with Customers
- Improve Customer Relations
- Reduce Cost of Ownership
- Significantly Surpass GM's OnStar Capabilities

Automated Vehicle Advisory Project Method

Telematics

+

Captology

Computers **And** Persuasive Technology



Automated Vehicle Advisory Project Telematics Application

Automatically

- Collect Vehicle Function Data
- Send Vehicle Data to Central Database
- Provide Cost-Saving Information to
 - Service Technician
 - Sales (Lease residue, used car value)
 - Customer
 - Insurance Agent
 - (other ...)

Automated Vehicle Advisory Project Captology Application

Computers And Persuasive Technology

Advise Customer to Change Behavior to Improve

- Eco-Driving Style
- Preventative Maintenance
- Vehicle Health
- Vehicle Usage

Automated Vehicle Advisory Project

Captology Application

Computers And Persuasive Technology

Advise Customer to Change Behavior

And Consequently

Reduce Cost of Ownership

Enhance Experience of Ownership

Automated Vehicle Advisory Project Potential Competition

BMW ConnectedDrive
Overview
Mobility network
BMW Assist
BMW Online
Internet in the vehicle
BMW Tracking
BMW
Drive
BMW
Haus

Intelligent Transportation Systems –
Interaction is what counts

Experience innovation.
A new degree of mobility and driving pleasure.
BMW ConnectedDrive is an innovative concept from the BMW Group that develops the technology of tomorrow for the automobiles of today. Focussing on the intelligent integration of driver, car and surroundings, the five services BMW Assist, BMW Online, BMW Tracking, BMW TeleServices and Driver Assistance combine to form a single, all-encompassing support network. BMW ConnectedDrive gives you a unique range of mobility - for sheer driving pleasure, today and tomorrow.

Automated Vehicle Advisory Project Potential Competition

GM's OnStar

Safety

Security

Assistance & Communication

Vehicle Health → basic "vehicle status".

AVA

Vehicle Health → comprehensive.
Preventative Maintenance
Symptoms

Vehicle Usage

Nissan's CarWings

Eco-Driving

Entertainment and Infotainment

Assistance & Communication

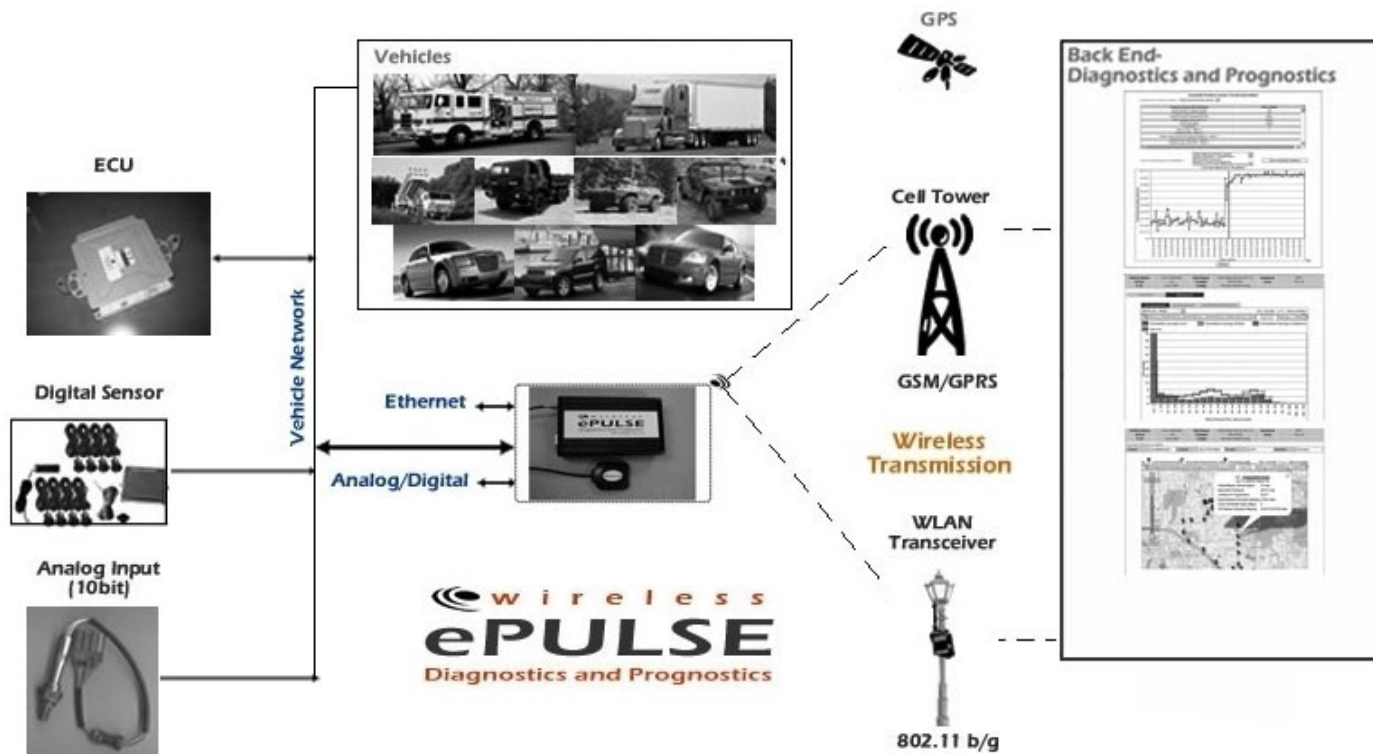
Eco-Driving Style

Automated Vehicle Advisory Project

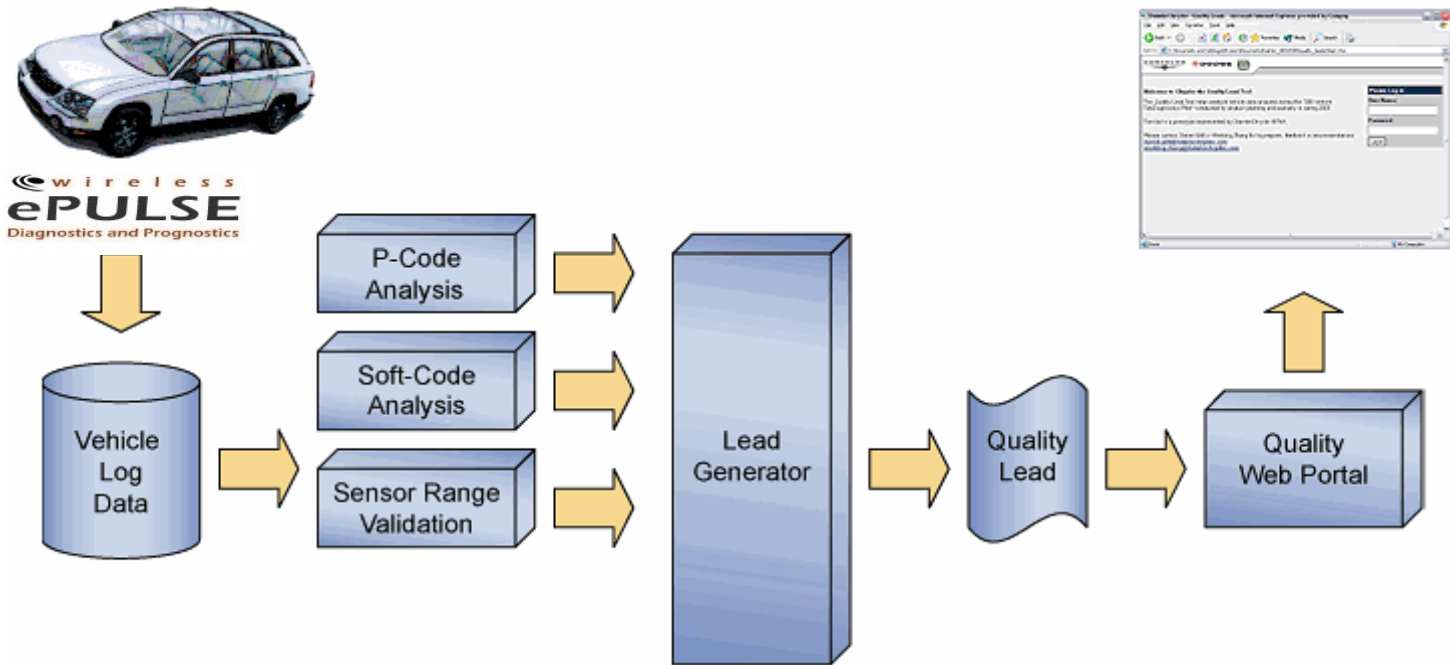
Implementation

Automatic Vehicle Advisory Project Telematics Application

- ✓ • Collect Vehicle Function Data
- ✓ • Send Vehicle Data to Central Database

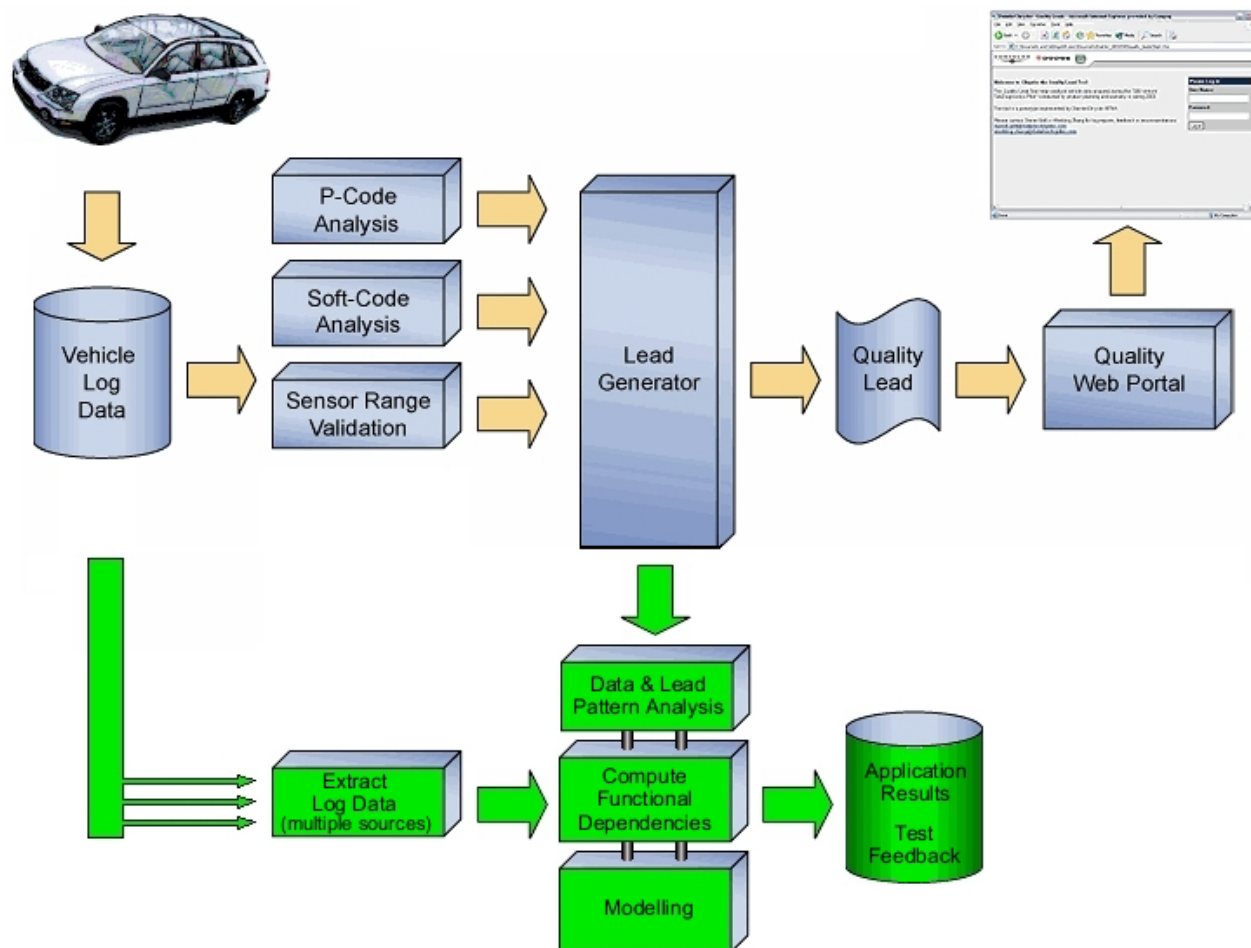


Automated Vehicle Advisory Project Existing Lead Generation System



Automated Vehicle Advisory Project

Add: Data Processing and Backend Database



Automated Vehicle Advisory Project

Example Results

Stored in Backend Database



Driving Style

Speeding
Rapid acceleration
Excess idling
Disuse of cruise control

Preventative Maintenance

Add or change oil needed
Add or change brake fluid
Clean or change air filter
Check tire treads

Symptoms

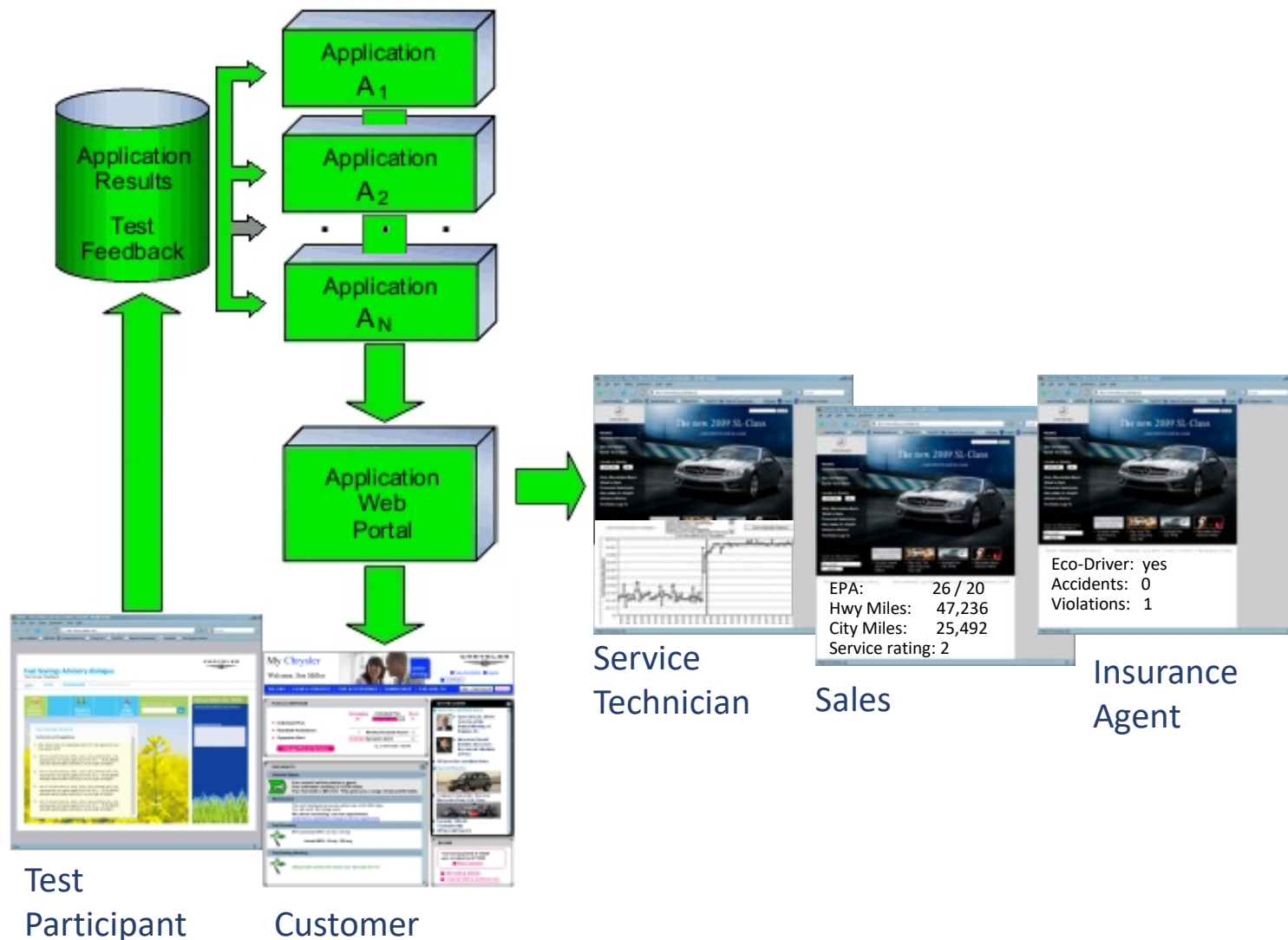
Engine tuning
Oxygen sensor function
Fuel injector function
Tire pressure

Car Usage

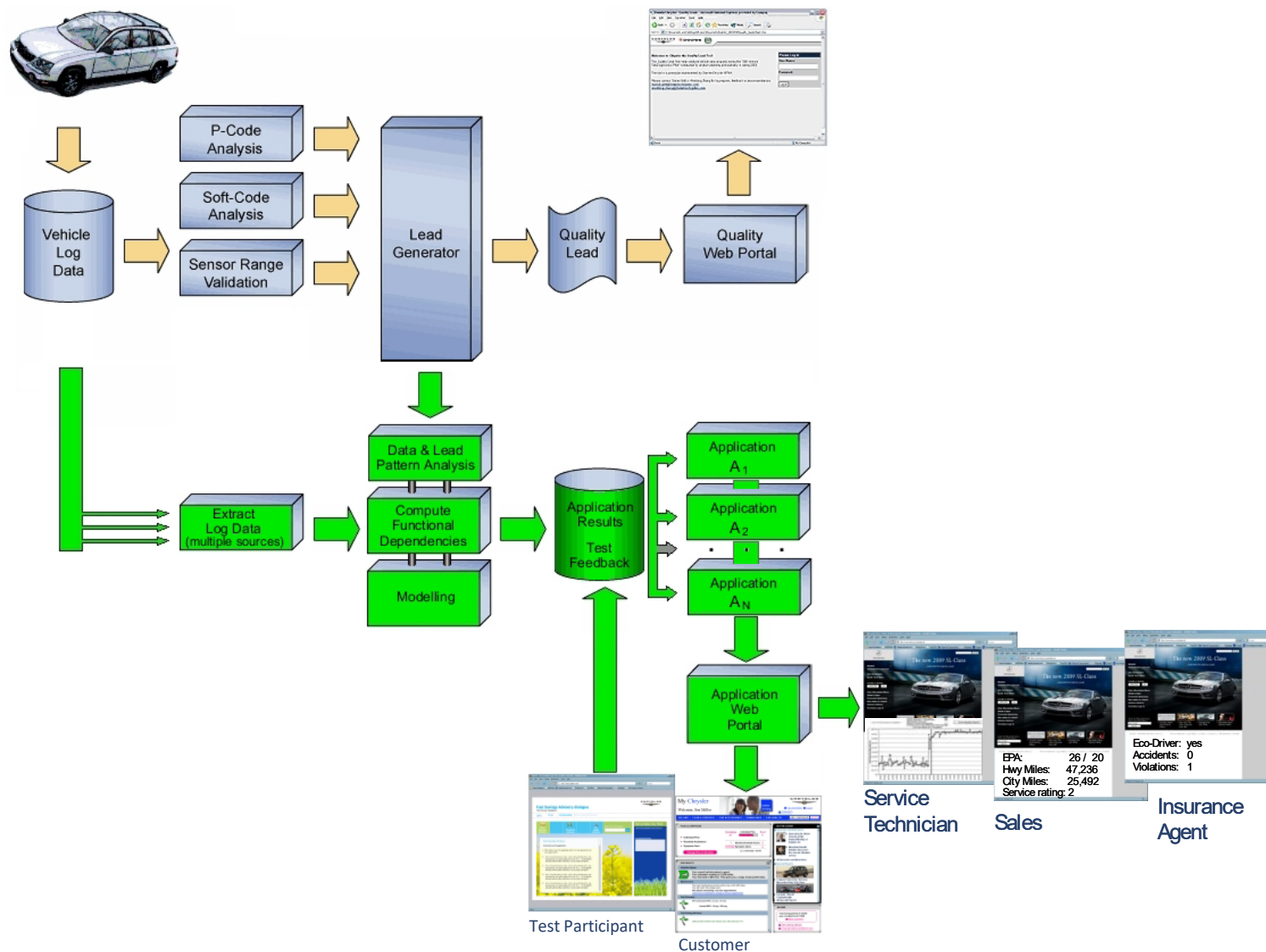
Driving in congested traffic
Frequent short-distance trips
Cumulative highway miles
Cumulative city miles
Actual EPA rating
CO2 emissions

Automated Vehicle Advisory Project

Add: Web Portal using Backend Database



Automated Vehicle Advisory Project



Automated Vehicle Advisory Project

Advisory Examples

Driving Style

Every week day around 3:00 pm, at the same location, the engine idles for around 15 minutes.

Idling gets 0 miles per gallon. Reduce your fuel costs by turning off the engine.

Car usage

Your cumulative miles for the first 7 months of this year is 12,380.

If you continue accumulating mileage at this rate, at the end of your lease, the maximum mileage will be exceeded by 3,666 miles.

This will add \$4,000 to your total lease payments.

Automated Vehicle Advisory Project

Value Proposition: Indirect

Improved Understanding of Car Usage → Improved Design and Features → Better Meeting-Needs → **Satisfied Customers**

Better Service → **Satisfied Customers**

Lower Cost of Ownership or Lease → **Satisfied Customers**

Satisfied Customers → Loyal Customers → Follow-on Sales