

# IOT Product Vignette: Bosch Smart Gas Pedal

**Physical:** Traditional lever action controlling throttle valve, haptic actuators

**Smart:** Pedal ECU microprocessor, pedal depression sensing, data analysis of pedal depression and relation to fuel usage with link to transmission and engine monitoring systems

**Connected:** Cellular/Satellite via Car onboard system, enabling access to real-time navigation and collision detection data

**Monitor:** Input from existing onboard systems including exceeding local speed limits, one-way streets, and upcoming traffic via navigation system, fuel usage, current gear

**Control:** Direct haptic feedback to user, user behavior correction

**Optimize:** Fuel savings (up to 7%), lower CO2 emissions, optimal gear shifting

**Automate:** Feedback during unsafe acceleration based on hazards and speed limits, warning when switching to fuel consumption on gas/elec hybrid models

