# happiest minds
### The Mindful IT Company
**Born Digital . Born Agile**

# M2M Telematics Product Development for leading Technology Company

## BUSINESS REQUIREMENTS

Support telematics devices and product enhancement

Build complete architecture of the solution around personal telematics and diagnostics device

Web and mobile based solutions

## OUR SOLUTIONS

Provide offline support for telematics device that includes support for Bluetooth and implementation of device tracking system like geo-fencing

Designing server side implementation

Complete lab setup for supporting system testing of the device

## TOOLS/ TECHNOLOGIES

**Device development:** CAN, Free RTOS, OBD protocols, ST Microcontroller, IAR EWARM, ST link

**Server Implementation:** PHP, MySQL, Mongodb and Python

Testing: Labsat, RF Chamber, Thermal Chamber, OBD II Protocol Simulator

## BUSINESS IMPACT

Enhancement of solutions like Geo -fencing, Low Power Reengineering and Accelerometer upgraded market position of the product
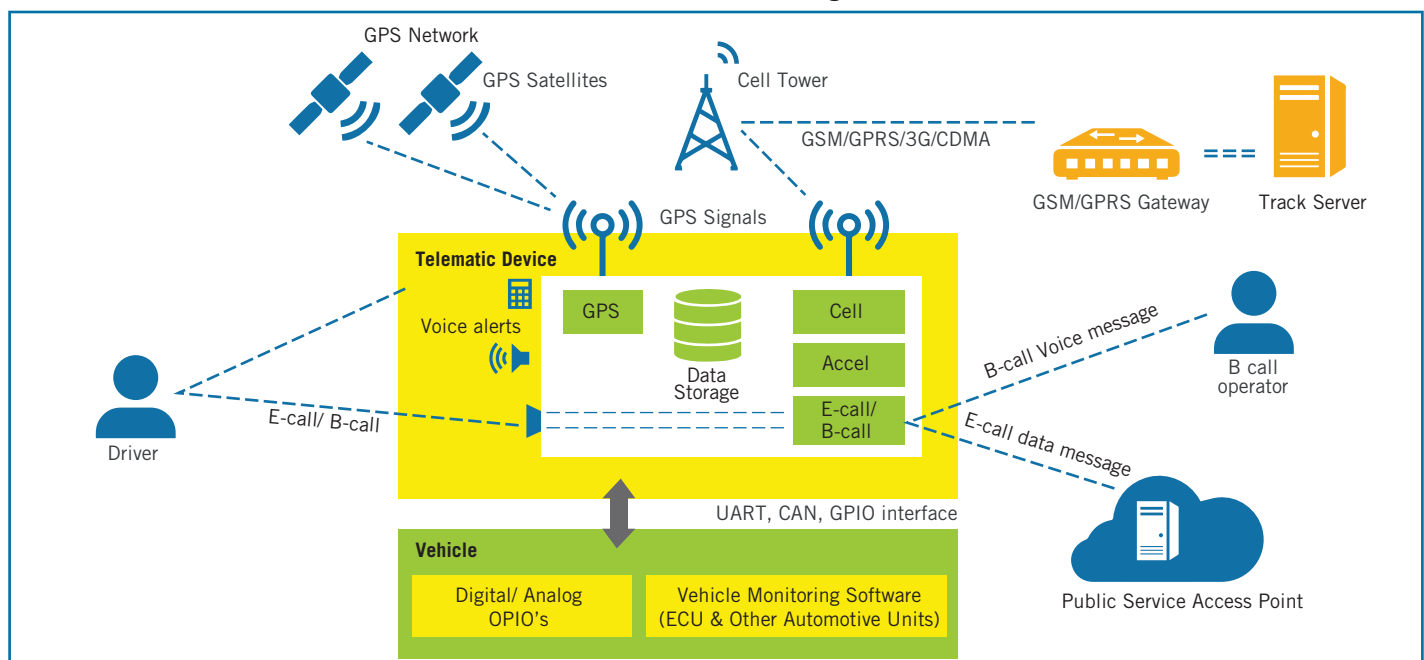
End to End system testing reduced existing gap and enhanced the product leading to successful deployment

Improvement of various features enriched look & feel and usability of product with cloud based tracking platform

## Solution Architecture Diagram



- GPS Network
- GPS Satellites
- Cell Tower
- GSM/GPRS/3G/CDMA
- GSM/GPRS Gateway
- Track Server
- GPS Signals
- Telematic Device
- Voice alerts
- GPS
- Data Storage
- Cell
- Accel
- E-call/ B-call
- B-call Voice message
- B call operator
- Driver
- E-call/ B-call
- UART, CAN, GPIO interface
- E-call data message
- Vehicle
- Digital/ Analog OPIO's
- Vehicle Monitoring Software (ECU & Other Automotive Units)
- Public Service Access Point

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