

## $F_{\rm NA}(20)$ A digital era for transport

solutions for society, economy and environment

# Innovative usage-based motor insurance for significant road safety improvement

### **1/ INNOVATIVE INSURANCE SCHEMES**

**Usage-based motor insurance (UBI) schemes:** 

### 2/ OSEVEN: THE COMPANY (www.oseven.io)

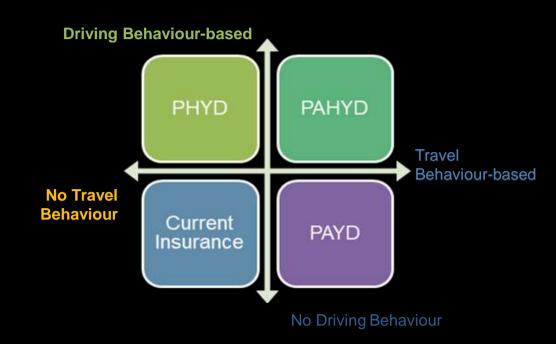
OSeven is a pioneer technology company that is specialized in **Driving Behaviour Analysis** and **Telematics Solutions**.



- **PAYD:** Pay-As-You-Drive
- PHYD: Pay-How-You-Drive
- **PAHYD:** Pay-As-How-You-Drive

**Advantages of these approaches:** 

- significant impact on traffic safety
- targeted premium pricing
- popular in global insurance marketplace



**Business:** Insurance, Fleet management, Rental and Leasing, Ride sharing, Taxi Hailing, Car pooling, Automotive, Banking.

The OSeven platform has been developed in cooperation with the Department of Transportation Planning and Engineering of the National Technical University of Athens.

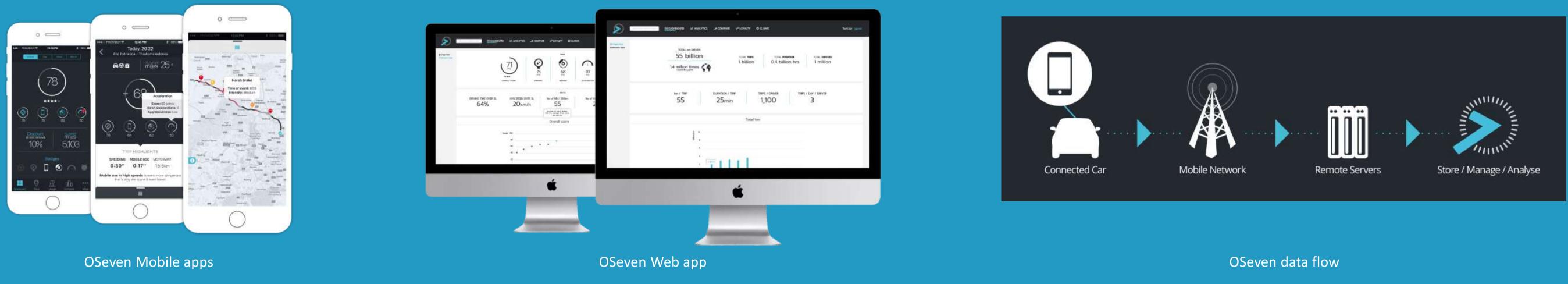
### **3/ OSEVEN PLATFORM**

#### **Platform components**

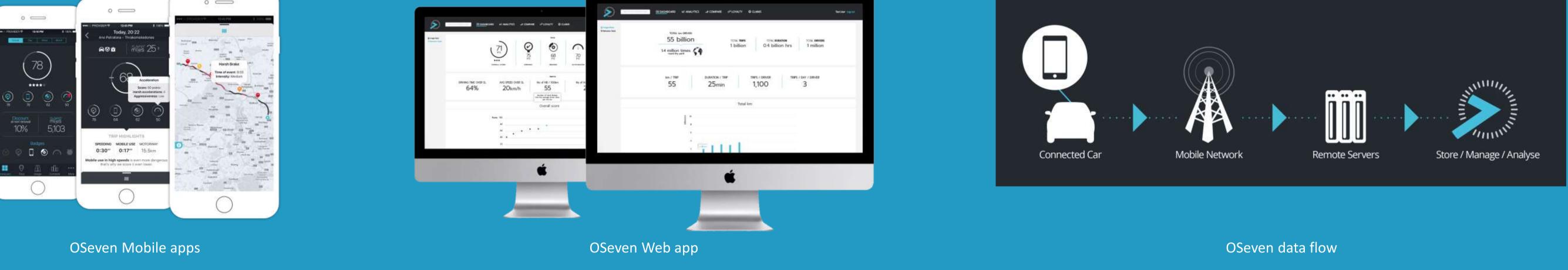
- user-friendly smartphone apps
- a state of the art backend infrastructure for big data analysis
- a web app for the visualization of the metrics and scores
- sophisticated Machine Learning algorithms
- Driving Scoring Model for the evaluation of the driving behaviour

#### **Data flow in OSeven platform**

- Mobile app detects the start and stop of driving, without any user involvement
- Data from smartphone sensors is recorded
- Data is transmitted to OSeven backend (WiFi or 3G/4G)
- Data is analyzed via the OSeven algorithms to produce driving metrics and scores
- Results per trip and overall can be viewed by the driver in the smartphone app and by the corporate clients for their fleets in the web app (in anonymized format).

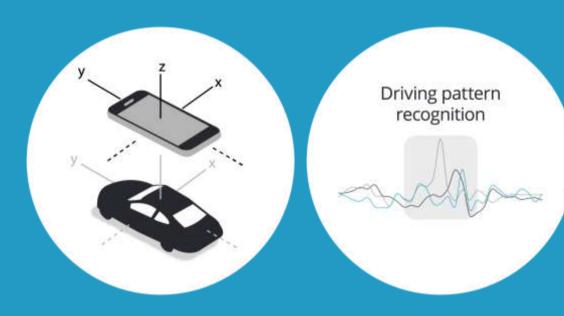


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### 4/ MACHINE LEARNING ALGORITHMS

- Signal processing methods
- Harsh events identification
- Mobile use, based only on sensors' data
- Mode detection (car, motorcycle, mass transit)
- Driver / passenger recognition
- Crash detection



### **5/ DRIVING BEHAVIOUR MODEL**

**Risk exposure indicators:** 

- total distance travelled
- driving duration
- type(s) of the road network used • time of the day driving

#### **Driving behaviour indicators:**

- speeding (driving over speed limit)
- mobile phone use (driving distraction)
- number and intensity of harsh braking, acceleration, cornering events (aggressiveness)

## Drivers

- Monitoring their driving performance
- Strong motivation to improve their driving behaviour
- Feedback / Education (e.g. messages, highlights, maps)
- Monetary benefits (e.g. lower premiums, loyalty awards)
- Cross-subsidies phenomenon elimination • Crash risk reduction

### **6/ UNIQUE VALUE PROPOSITION**

- Companies
- Claims frequency reduction (up to 30%)
- Loss ratio reduction
- Customer engagement
- Lower costs for fleets (e.g. fuel, insurance)



- Safer roads (reduction of road accidents)
- Pro-active measures based on driving performance
- Lower costs
- Environmental benefits (e.g. lower emissions)

• Better user experience (e.g. social gamification) • Transparency (e.g. in ride sharing, car pooling)

Energy-efficient driving behaviour

OSeven has succeeded in transforming the smartphone, the most significant factor of distracted driving, from trouble-maker into trouble-solver. While smartphones are sometimes characterized as killing-machines due to the increased distraction during driving, OSeven made it a game-changer in the everyday fight against traffic accidents.

MAKING OUR LIFE SAFER, ONE RIDE AT A TIME

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