

PTOLEMUS Consulting Group

# Making the telematics business case work

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# PTOLEMUS is the first strategy consulting firm focused on telematics and geolocation

## Our consulting services

### Strategy definition

New market entry  
Business plan development,  
board coaching and support

### Investment Evaluation

Due diligence  
Market assessment  
Feasibility studies

### Procurement strategy

Specification of requirements,  
launch of tenders,  
supplier negotiation & selection

### Innovation management

Product & services development,  
roadmap definition,  
project management & launch, patent strategy

### Business development

Partnership strategies,  
response to RFPs,  
lobbying

### Implementation

Project & programme management, risk analysis & mitigation strategy

## Our fields of expertise

### Mobile content and social networking

Application stores, crowd-sourcing, etc.

### Navigation & location-based services

Maps, traffic, fuel prices, speed cameras, parking, etc.

### Usage-based charging

PAYD / PHYD insurance, Road User Charging,  
PAYD car leasing & rental

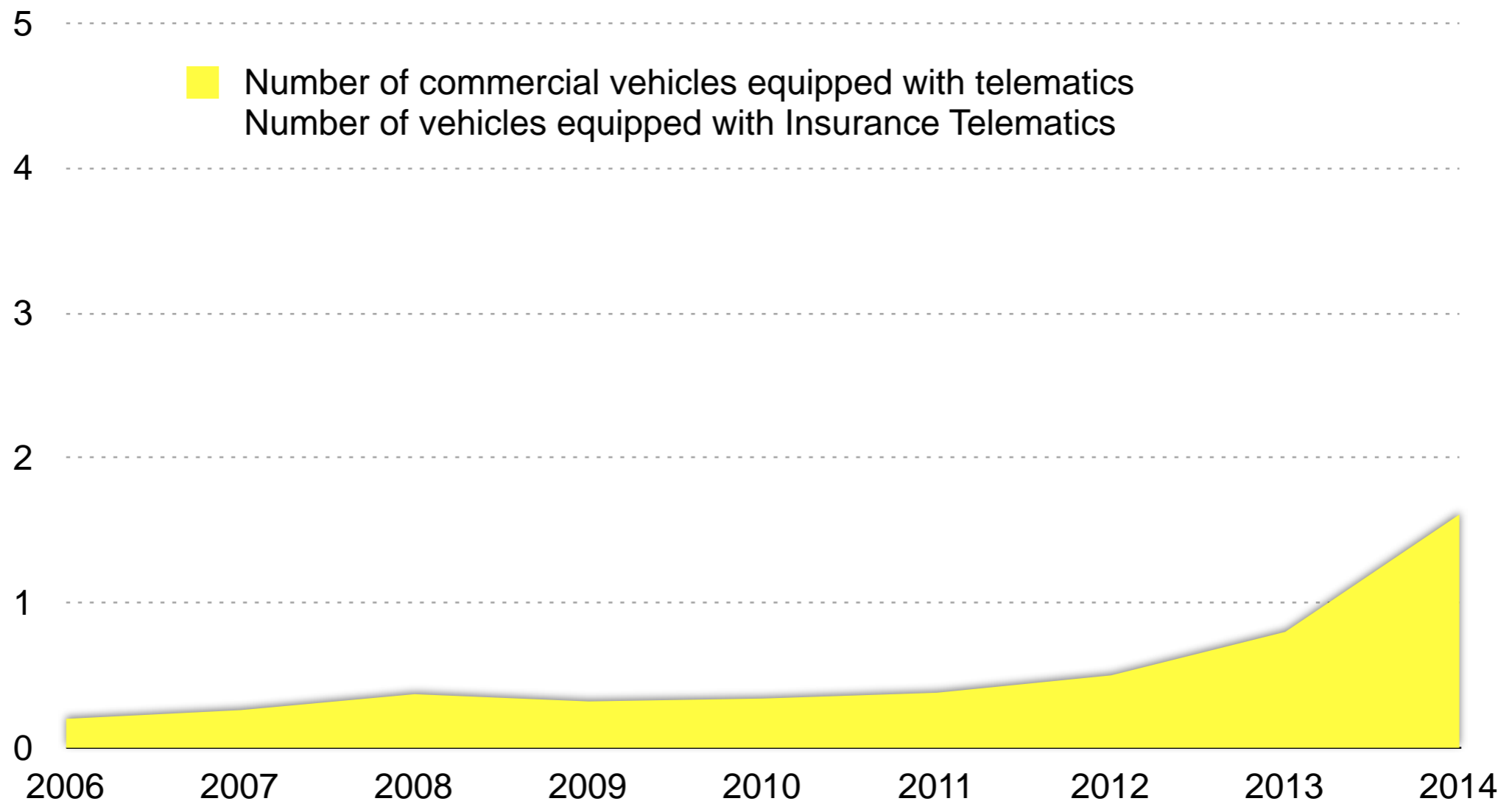
### Telematics & Intelligent Transport Systems

Connected car, tracking, fleet management, eCall, bCall,  
Stolen Vehicle Recovery, Car As A Service, etc.

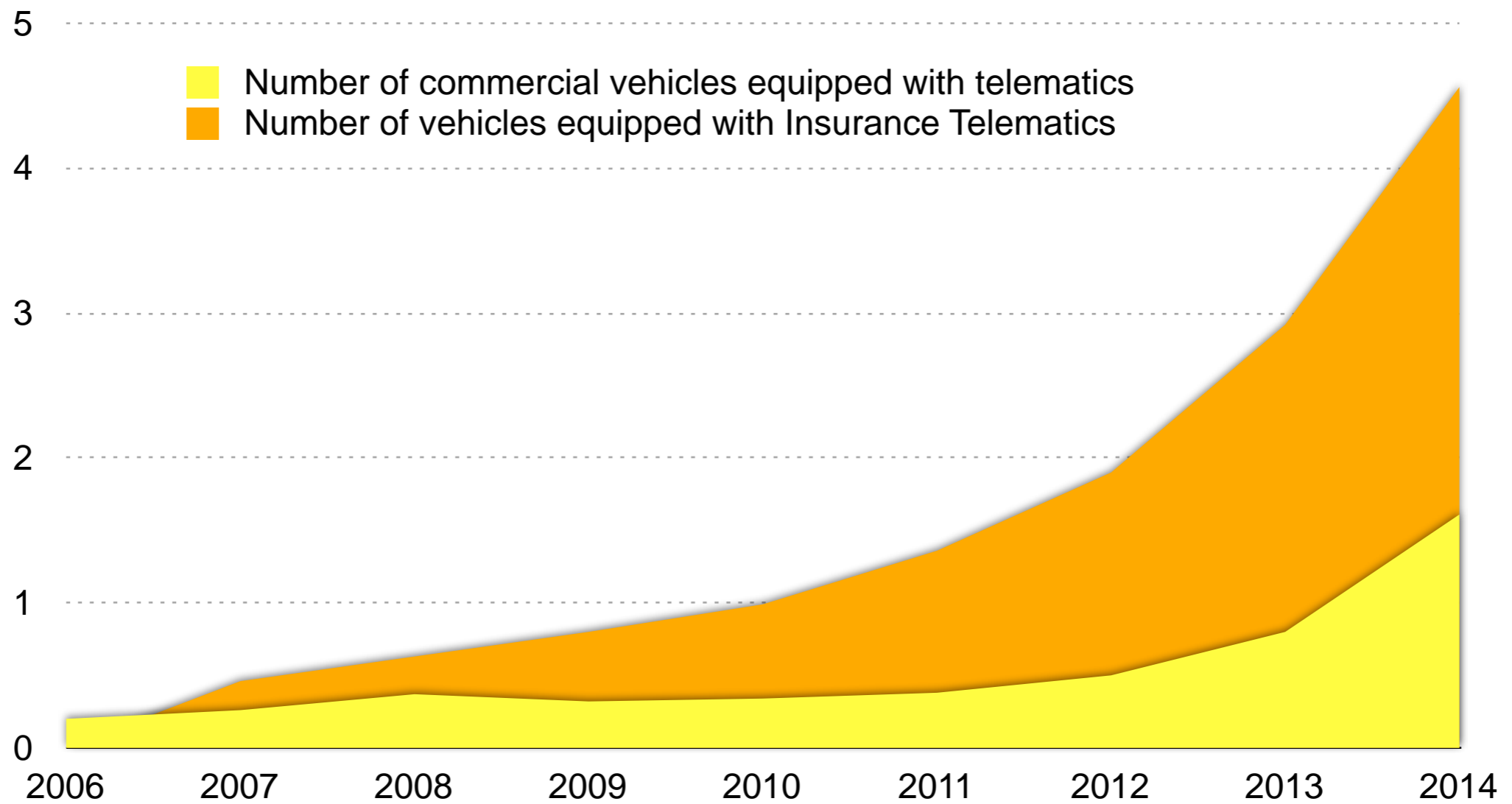
### Positioning / Location enablement

### M2M & connectivity

# Usage-based Insurance (UBI) in Europe installs more devices in vehicles that telematics.



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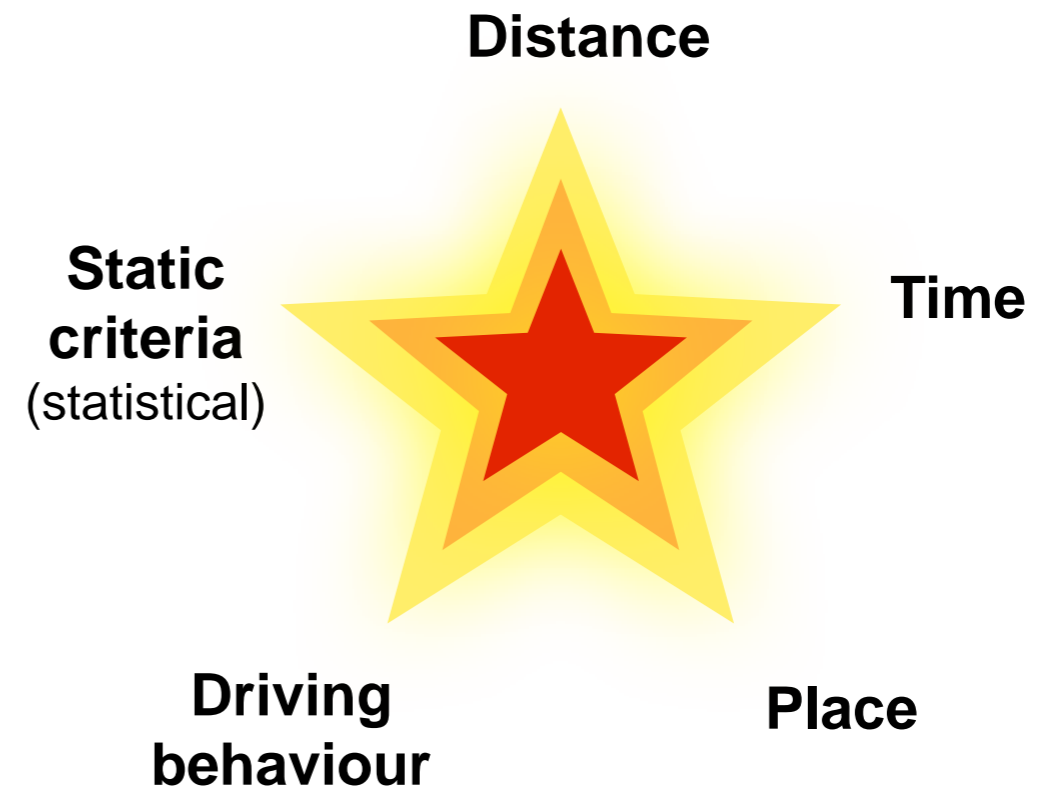


## What is insurance telematics?

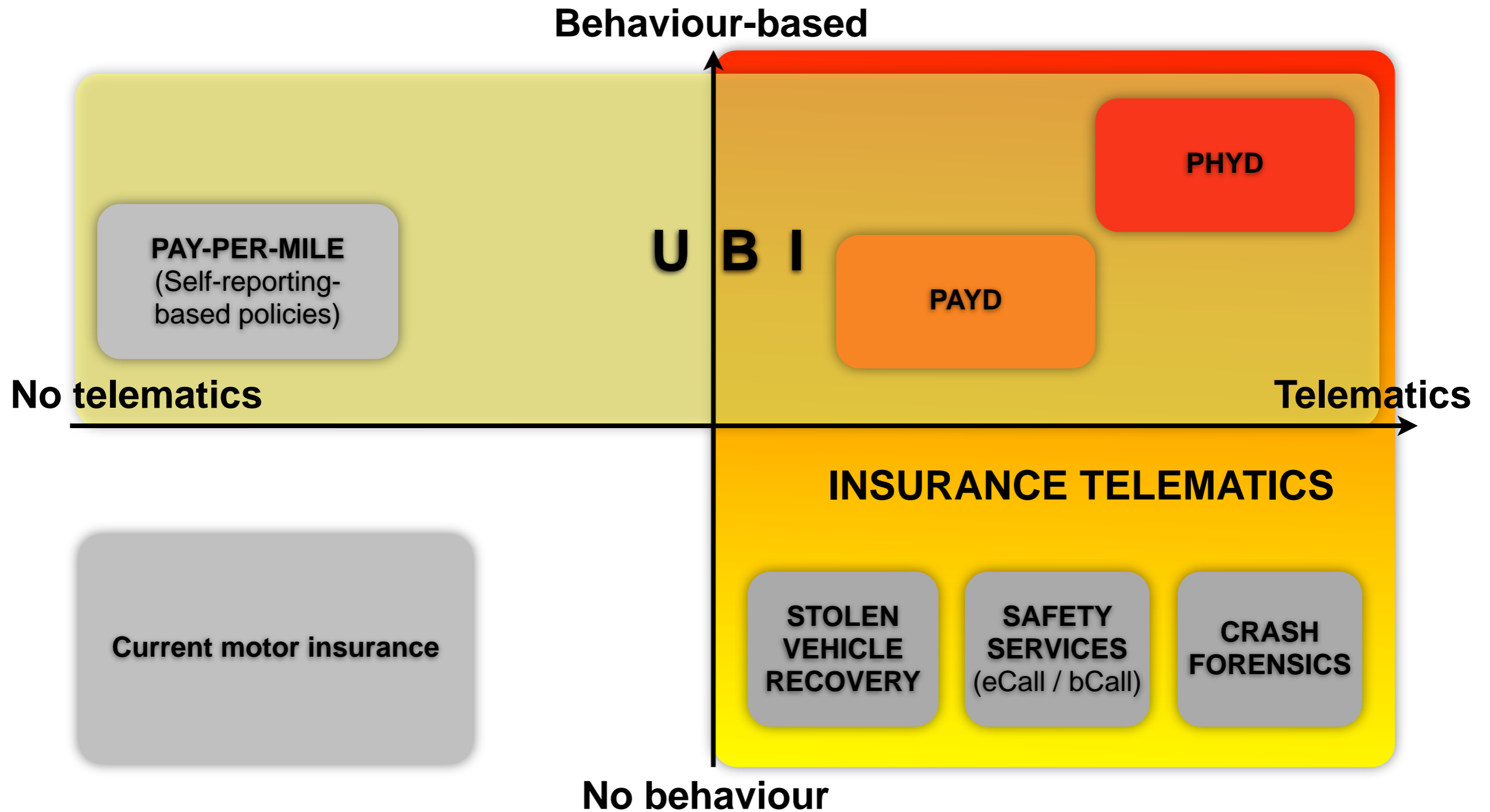
### Its basic principles

- **Most current insurance policies use static / statistical criteria to evaluate drivers' risks** - Age, gender, vehicle make & age, place of residence, occupation, etc
- **Insurance telematics is a policy based on these criteria and 4 new dynamic parameters**

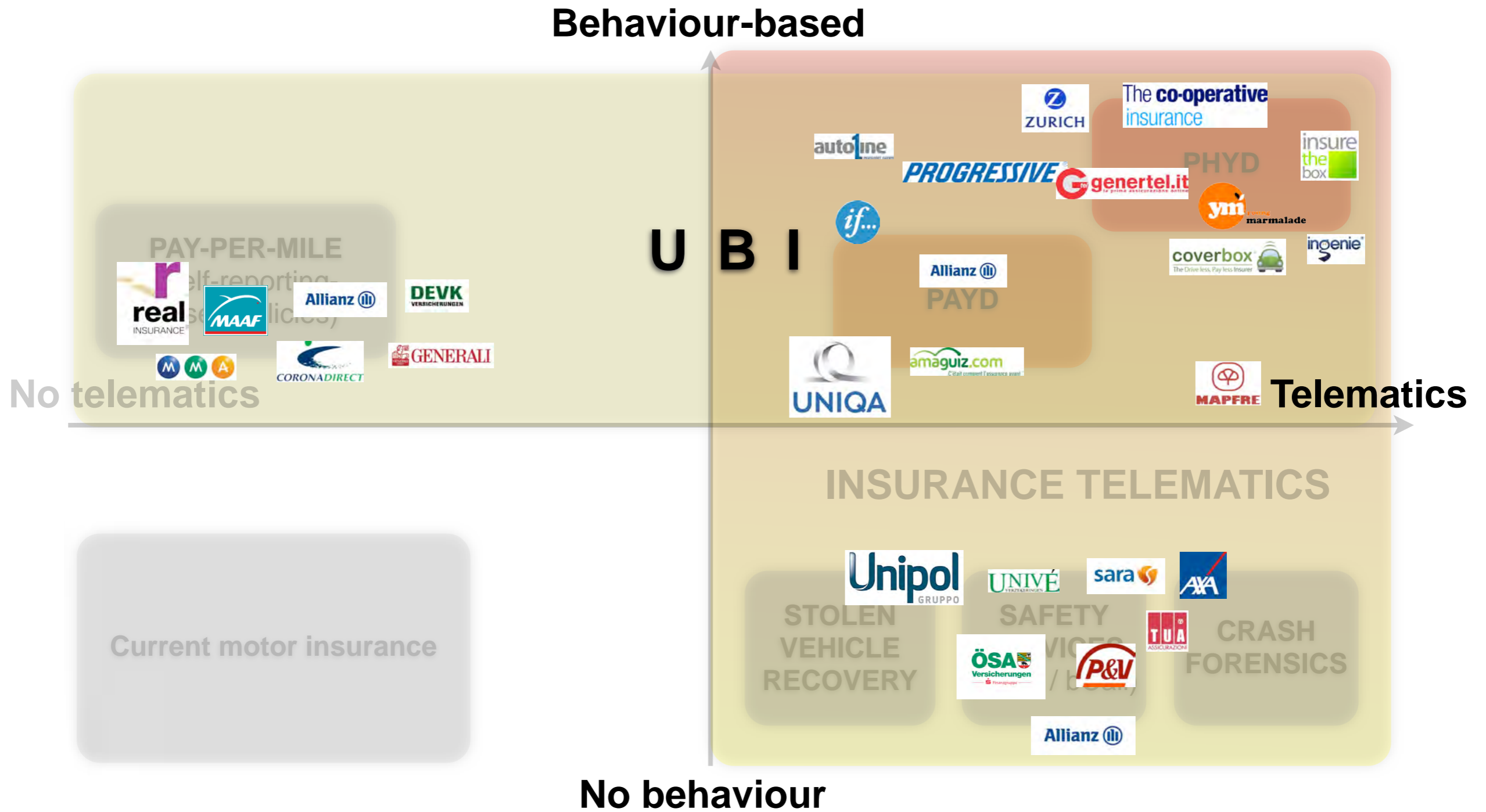
### The driving risk star



# There are many flavours of telematic insurance models

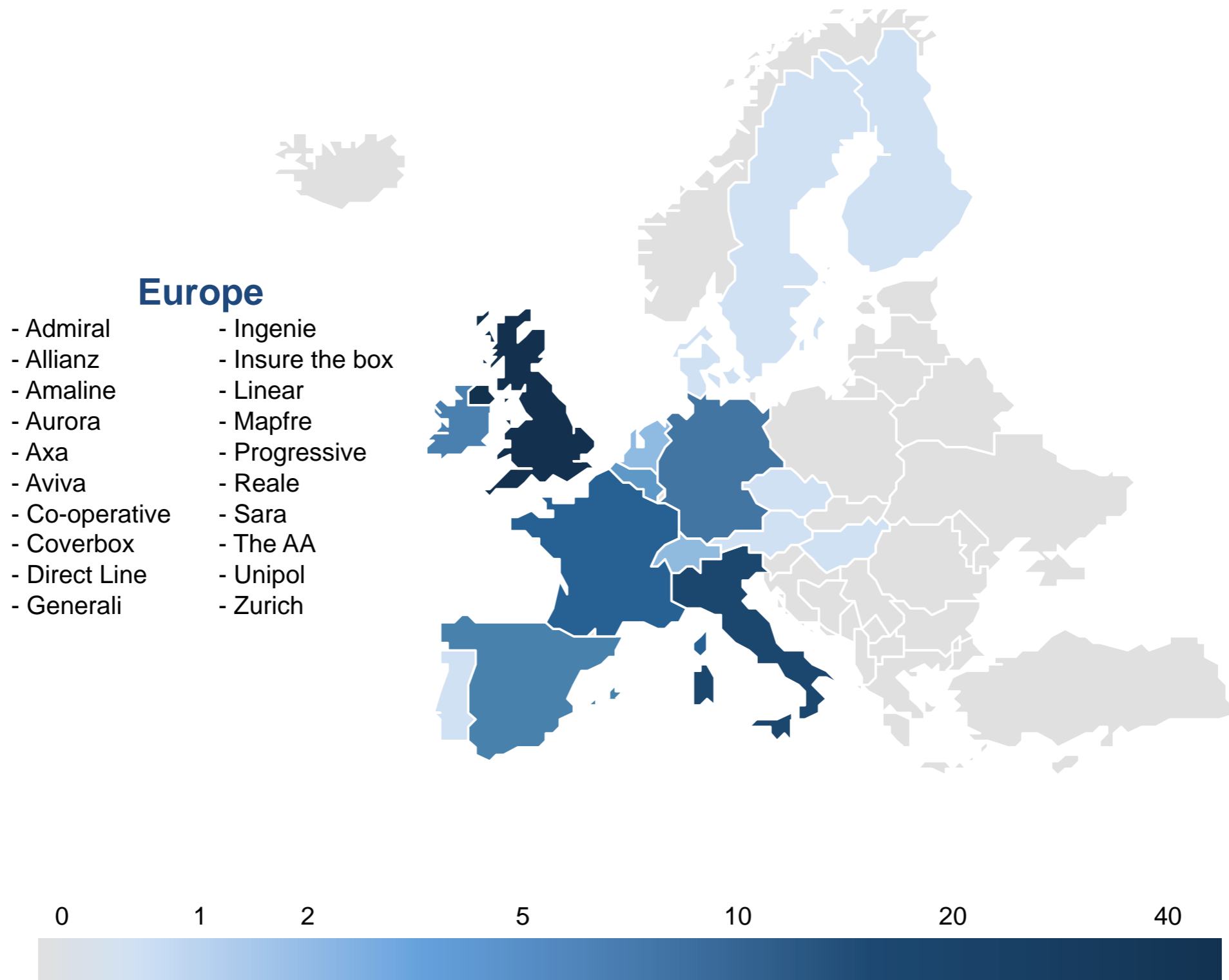


# There are many flavours of telematic insurance models





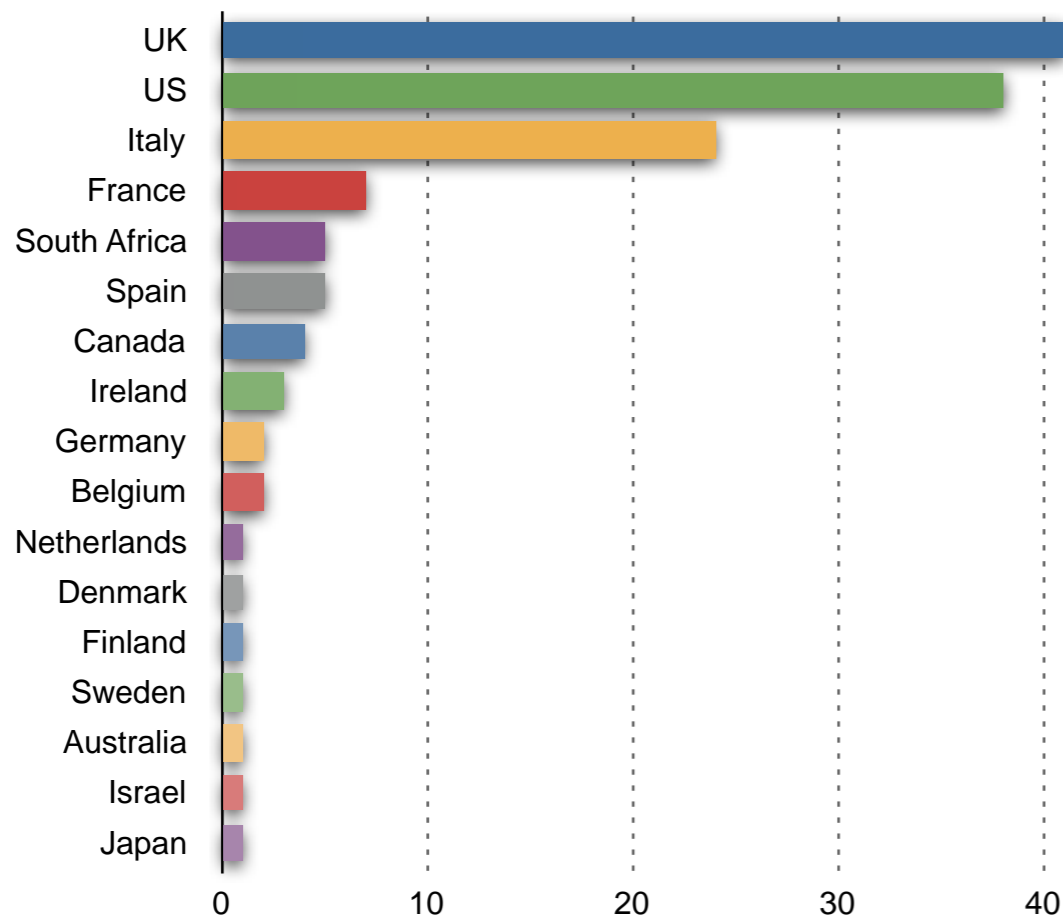
# Usage-based insurance: European trials & launches





# Fundamental barriers to UBI

## UBI trials and launches

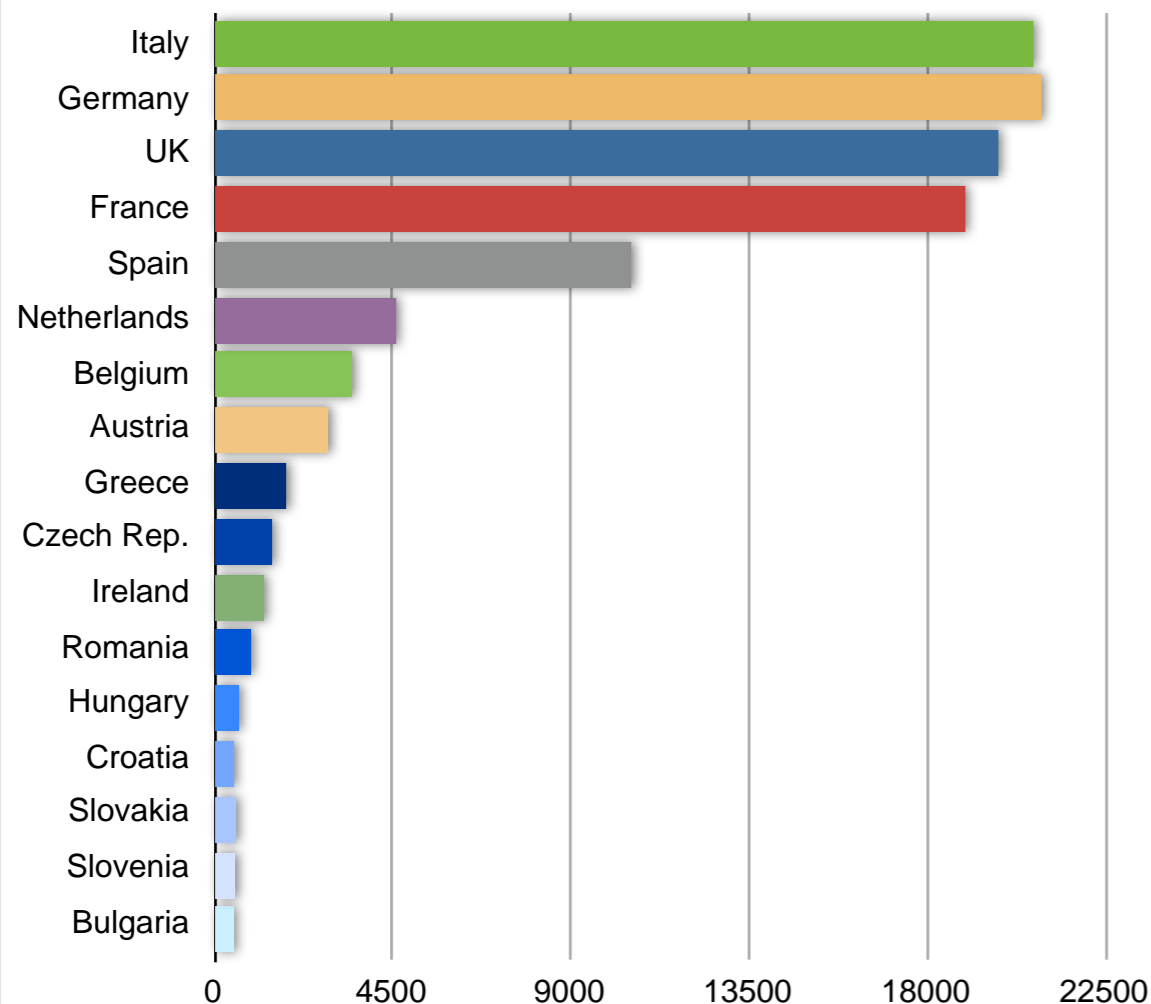


## Insurers won't make the first step

- It won't work here
- Why give a discount when the premiums are already too low?
- UBI require fundamental changes and IT power
- There are better ways

# Fundamental barriers to UBI

## Motor gross written premiums - 2002-2011 (€m)



## Insurers won't make the first step

- “It won't work here
- Why give a discount when the premiums are already too low?
- UBI require fundamental changes and IT power
- There are better ways”

# In all markets, there are specific challenges to telematics

## Challenges faced by insurers to launch UBI

		Italy	UK	France	Germany	Spain	CEE
2013	Business case	Yellow	Yellow	Red	Red	Yellow	Red
	Technology solution	Green	Green	Yellow	Yellow	Green	Yellow
	Marketing strategy	Green	Green	Yellow	Yellow	Green	Red
	Sufficient data for scoring	Green	Green	Red	Red	Yellow	Red
	Channels	Green	Green	Yellow	Yellow	Yellow	Red
	Customer privacy*	Green	Green	Yellow	Yellow	Green	Yellow

## The single most important driver of telematics is... economics

- **Better evaluate of risks:**
  - **Discriminate between safe and dangerous drivers**, thereby enabling a decrease of insurer's combined ratio
  - Re-establish **fair pricing between male and female drivers**
- **Reduce claims by fighting against fraud**, which represent £3 billion in 2011 or £75 on each driver's premium in the UK
- **Increase customer retention: rewarding the 75% of policyholders** who pay for the other 25% most dangerous drivers



### Costs:

- CAPEX
- Time
- Mindset
- Discount

# The insurance environment is moving fast and UBI will help

## New environment market drivers

- The **Monti law**, which could make telematics a mandated offering for Italian MTPL insurers
- The **economic situation** makes it difficult to acquire new customers
- **Fraud** is endemic and costly
- New **target markets** can be served

## Regulation change

Main driver / Owner	Vehicle	Cover
<ul style="list-style-type: none"> <li>• <b>Age</b></li> <li>• <b>Gender</b></li> <li>• <b>Marital Status</b></li> <li>• <b>Residence</b></li> <li>• <b>Number of children</b></li> <li>• <b>Years with driver's licence</b></li> <li>• Type of licence</li> <li>• <b>Occupation</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Type of use</b></li> <li>• Make &amp; model</li> <li>• <b>Engine power</b></li> <li>• Weight</li> <li>• Age</li> <li>• Type of fuel</li> <li>• <b>Value</b></li> <li>• Maximum speed</li> <li>• Driver / Owner same?</li> <li>• First vehicle?</li> <li>• No. of other vehicles in household</li> <li>• <b>Yearly mileage</b></li> <li>• Burglar alarm?</li> <li>• Stolen vehicle recovery system?</li> <li>• Garage?</li> </ul>	<ul style="list-style-type: none"> <li>• Type of price</li> <li>• Exclusions</li> <li>• Additional cover</li> <li>• <b>Risk certificate</b> (Accidents in past 5 years)</li> <li>• <b>Bonus/malus class</b></li> <li>• Premium by instalments</li> <li>• <b>Cover amount</b></li> <li>• <b>Excess amount</b></li> </ul>

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## New environment market drivers

*We expect all statistical factors related to individuals to be forbidden within the next 10 years*

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# The technology range used in UBI is potentially very wide

## Possible technologies for vehicle connected services





# But only a few have been tested ...

## Possible technologies for vehicle connected services



Aftermarket


**Black box**  
  
**Digital tachograph**  
  
**FMS box**  



**OBD device**  
  
**Self-energised connected modules**  
  
**Cigarette-lighter device**  
  
**DSRC tag**  


**PND**  
  
**Smartphone**  
  
**Speed camera locator**  


Line-fitted

**OEM system**  
  
**Supplier system**  


**Semi-embedded system**  


**Vehicle keys**  


Fixed

Removable

Portable

# UNIQA "The first motor insurance that can save lives"

## Objectives

- Differentiation
- Testing ground
- Improved selection of risks
- Better prevention of risks

## 2007 *SafeLine* Launch:

- Tested with 300 customers
- Used Octo
- Offer device with crash sensor and eCall button
- Minimum contract 3 years
- 5% discount on MTPL, plus mileage based discounts



# Unipol has entirely designed the model that suited its market conditions



## Unipol, the pioneer



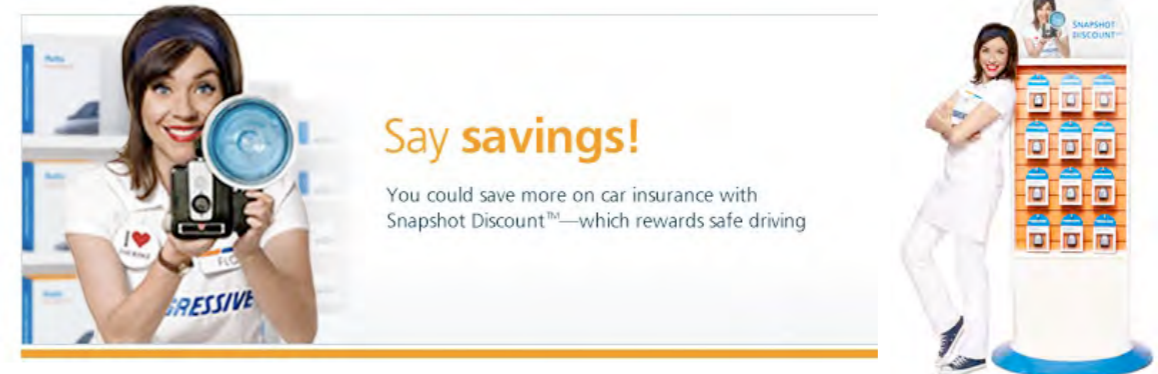
The Italian market is strongly affected by fraud and a high level of vehicle theft

- Unipol co-invented insurance telematics in Europe, together with Octo Telematics, in 2003
- It launched an offer that addressed the market key issues:
  - A professionally-installed black box that can offer stolen vehicle recovery
  - A crash analysis capability to fight against fraud
- Also proposes automatic crash notification and a location-based breakdown service
- Despite its complexity, the **project** has **over 800,000 telematic customers**

# The biggest success in Usage-based Insurance today

## Progressive's Snapshot programme

- 1.4 million customers
- No fee for the device, self installed
- Tariff set after a 30-day observation period
- Discount can reach up to 25%
- 75 days tracking period after which the customer is required to send the device back to Progressive



## Key facts about the launch history

- Launched PAYD trials as early as 1998 with the *Autograph* device
- In 2004, launched *TripSense* which used OBD-II dongle
- In 2008, launched *MyRate*, an improved PAYD offering
- Latest product, *Snapshot*, was launched in 2010
- TTP: Davis Instruments initially; now Xirgo Technologies, Connectivity provider: AT&T



# Commercial vehicle are a great target market for UBI

## Usage-based fleet insurance can work

- High mileage and load-related risks
- Fleet telematics is UBI technology
- CAN-bus data is much more accurate
- Driver safety is a crucial
- Costs of accident
- Installation
- Fulfillment

The effect of telematics on accidents is much bigger than fuel savings



## Insurers are however not just an “other fleet”

### TSP perspective

#### Be ready to climb a big step

- No budget for boxes
- No strategy
- One year to decide
- Very complexed needs
- Raw data first



### Insurer perspective

#### Pioneers have gone through some challenges:

- Insurance does not sell fleet management
- No standards in telematics data
- Risk Vs. and Performance management
- Branding and communication

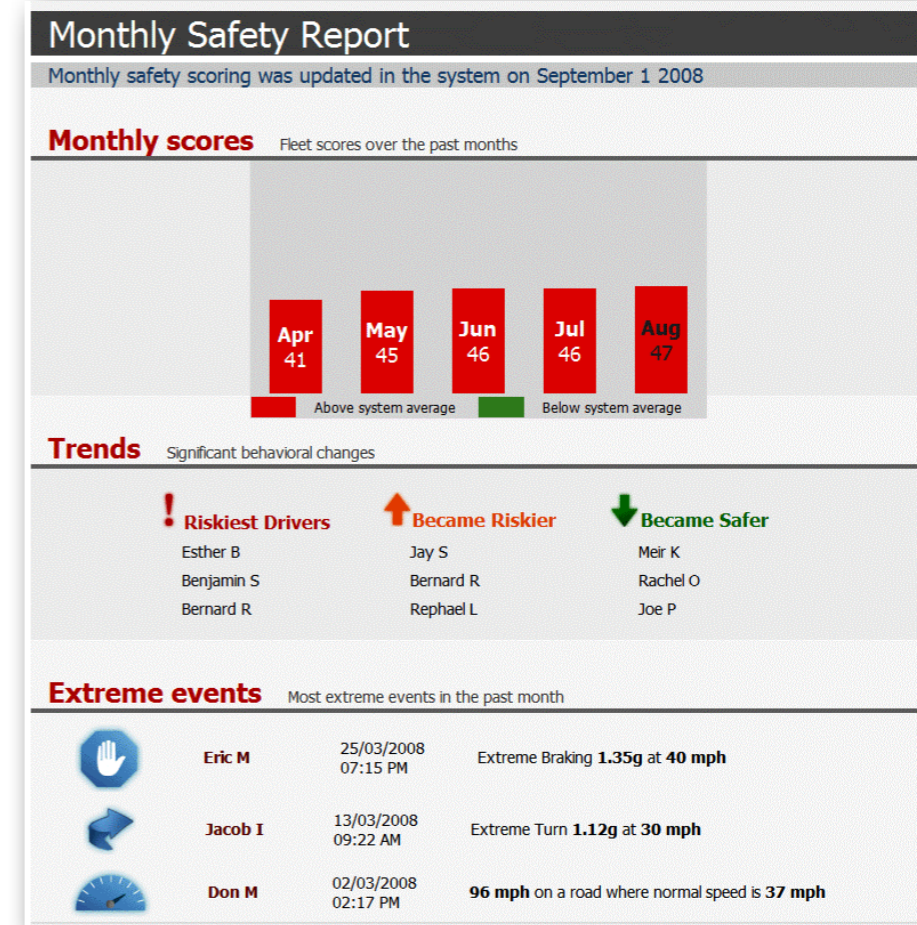
# Liberty Mutual stopped selling Fleet Management Services

## OnBoard Advisor 1

- Retail network to resell FMS from GE Commercial Finance
  - Safety score
  - Fuel score
  - Insurance discount score.
- 15% discount in the first year
- Max 40% discount at renewal.
- No upfront hardware cost.  
Monthly fee charged for the GE services.

## OnBoard Advisor 2

- Liberty integrated 5 different TSPs
- Same benefits and discount
- Geotab, Teletrac, Telenav, Telogis and Trimble (PeopleNet )

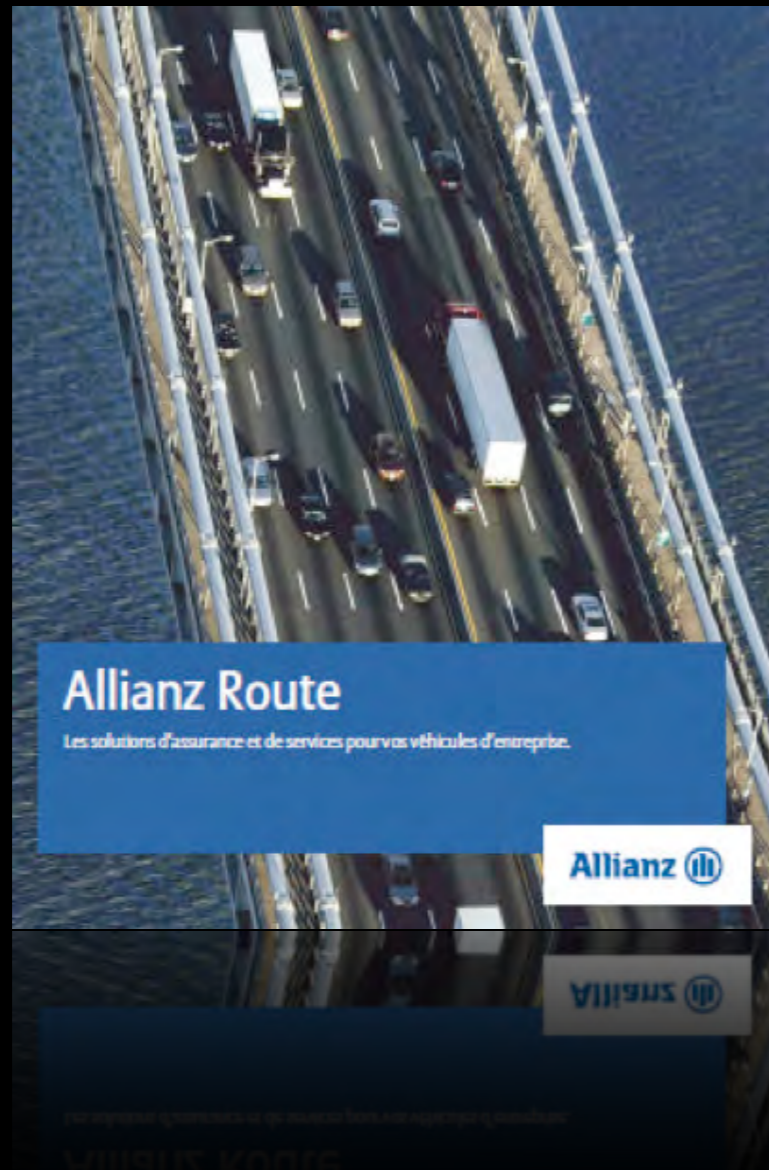




# Allianz has tested several telematic models on European commercial line markets



## Allianz, the Telematic Service Provider



- **Created its own telematic business unit** at a global level
- Specifies & purchases a black box directly from its technology suppliers, notably MetaSystem
- Launched a **simple fleet management service** (Mileage, time & trips, Pay per use model) in Italy, France, Germany, Spain, the Netherlands, Switzerland, Greece and the Czech Republic
- Also proposes eCall, bCall and SVR
- **Sells it directly to its fleet customers** through its commercial network

# Using a smartphone for insurance data collection is not science fiction any more



## Smart phone, smart insurance?

- In June 2012, Autoline, a Northern Ireland broker, was the first worldwide to use a smartphone application to
  - Record driving behaviour data
  - Calculate drivers' score on a scale of 100
- The application is developed by **MyDrive Systems**, which has also developed the rating algorithm
- It promises users discounts of
  - Up to 40% for App users
  - Up to 50% for safe drivers
- The policies are underwritten by a panel of insurers

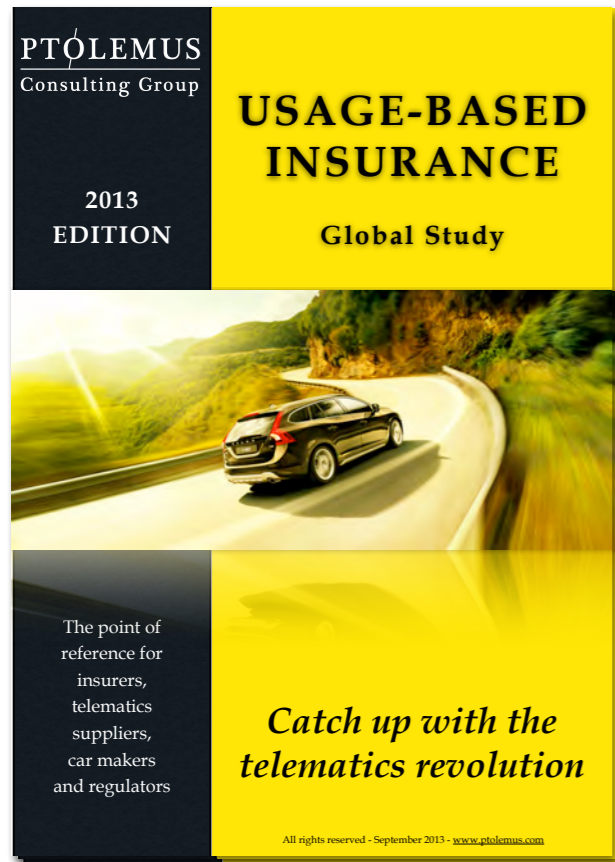
## **Making UBI work means solving the following challenges**

- There will be no iPod
- Focus on the real problem first
- Sell it as a service
- Premium discount is not the whole story
- Adapt the technology to the target market
- Find a suitable financing mode
- Fulfillment is where many trials failed
- Many partnership models
- SmartPhone model is an opportunity
- Commercial vehicles can be an entry market
- Understand the insurers needs





# “A truly comprehensive picture of the UBI market”



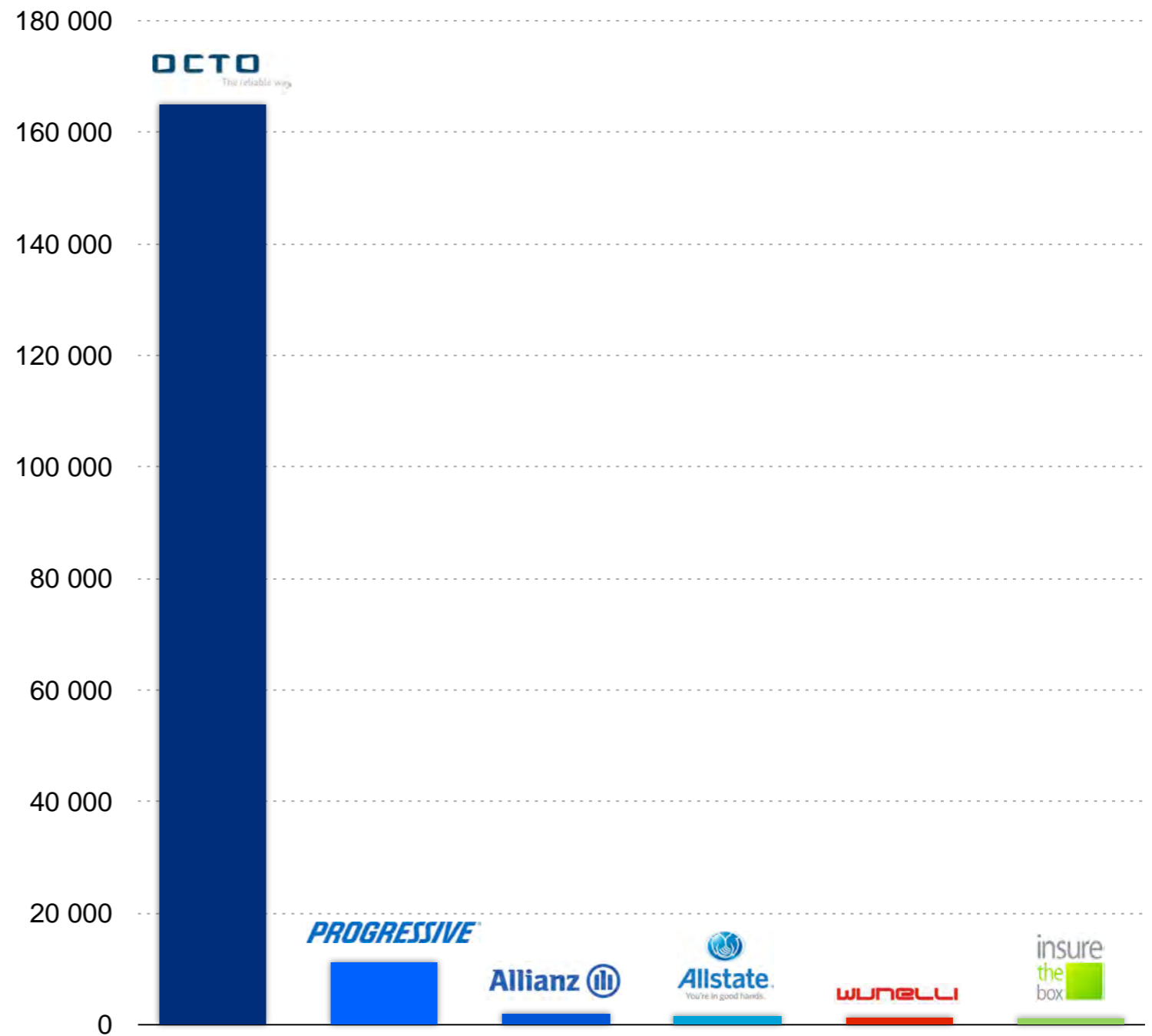
**More than a research study, a real strategic market analysis**

- **770 pages of rigorous analysis of the PAYD / PHYD market based on**
  - 201 interviews in 18 countries
  - 330 figures and charts
  - 3 years of hands-on experience
  - Our knowledge of the ecosystem incl. OEMs and TSPs
- **38 Case studies & teachings** including Allianz, Amaguiz, Cobra, Coverbox, Insurethebox, Ingenie, OnStar, Hollard Insurance, Insurethebox, Liberty Mutual, MAIF-MACIF, Norwich Union, Octo Telematics, Progressive, Quindell, State Farm, Unipol, Uniqa, Zurich
- **A handbook of 45 + suppliers' solutions** including our own evaluation & ranking
- **10-year market forecasts**
  - Country forecasts for Canada, China, France, Germany, India, Italy, Japan, Russia, South Africa, the UK and the US
  - Bottom-up estimates of the number of policies for each insurer in the US, the EU and in South Africa
- **Telematics Insurance market models**
  - Markets' readiness to UBI for 20 countries
  - 6 markets analysis\*
- **A complete set of recommendations** to Insurances, Regulators, TSP, OEMs and operators
- **A strategic analysis of the value chain evolution** including
  - The impact of eCall
  - The role of the smartphone
  - The new patents and partnerships

# The first entrant's advantage

## Octo's DB of drivers data

(in millions of miles of driver data)



Any questions ?

PTOLEMUS Consulting Group

Strategies for Mobile Companies



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