

Usage Based auto Insurance (UBI)



Building a better
working world



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Building a better
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The connected car

Consumers now have a digital connected lifestyle with a range of devices always connected to the internet





CONNECTED VEHICLE

CONNECTED NAVIGATION



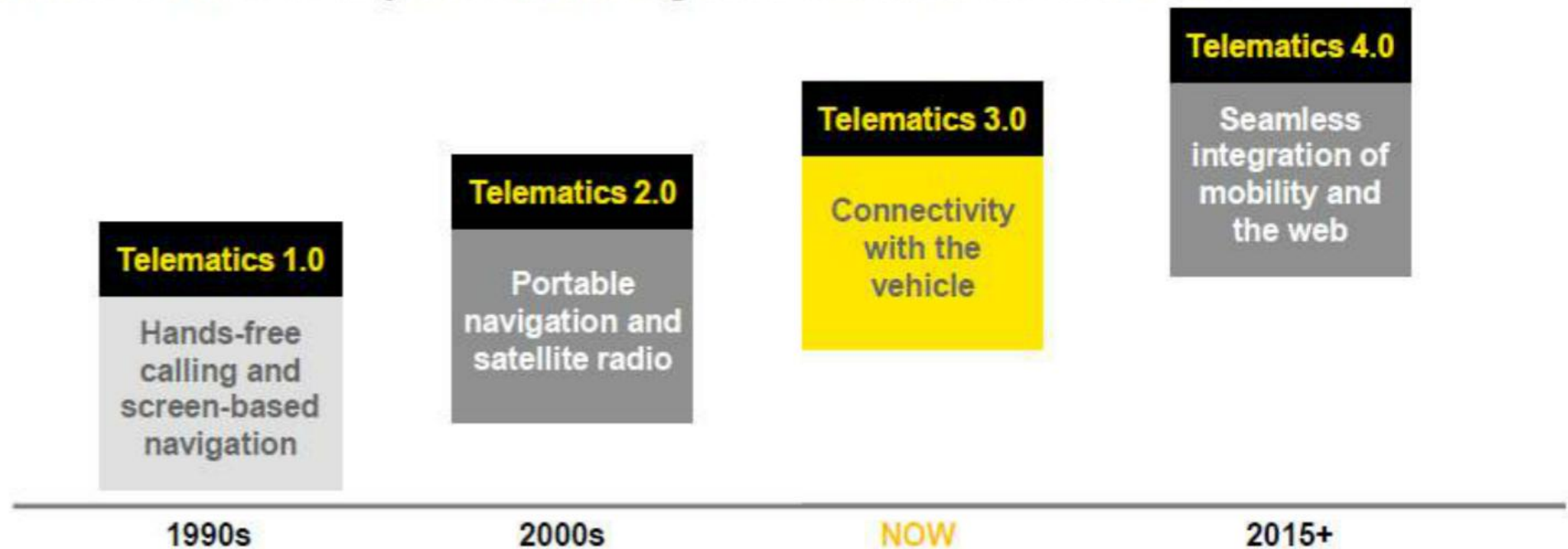
CONNECTED INFOTAINMENT





Telematics evolution: enormous potential remains untapped

Providing in-car connectivity will be essential for carmakers in the future, however the industry is still looking for viable business models



The global telematics market is poised to grow exponentially. By 2025:

90%
of new cars will have
embedded telematics

€19 billion
total revenue from
embedded telematics

€12 billion
of the revenue from
service and content
providers



1 They fit a clever little device into your car



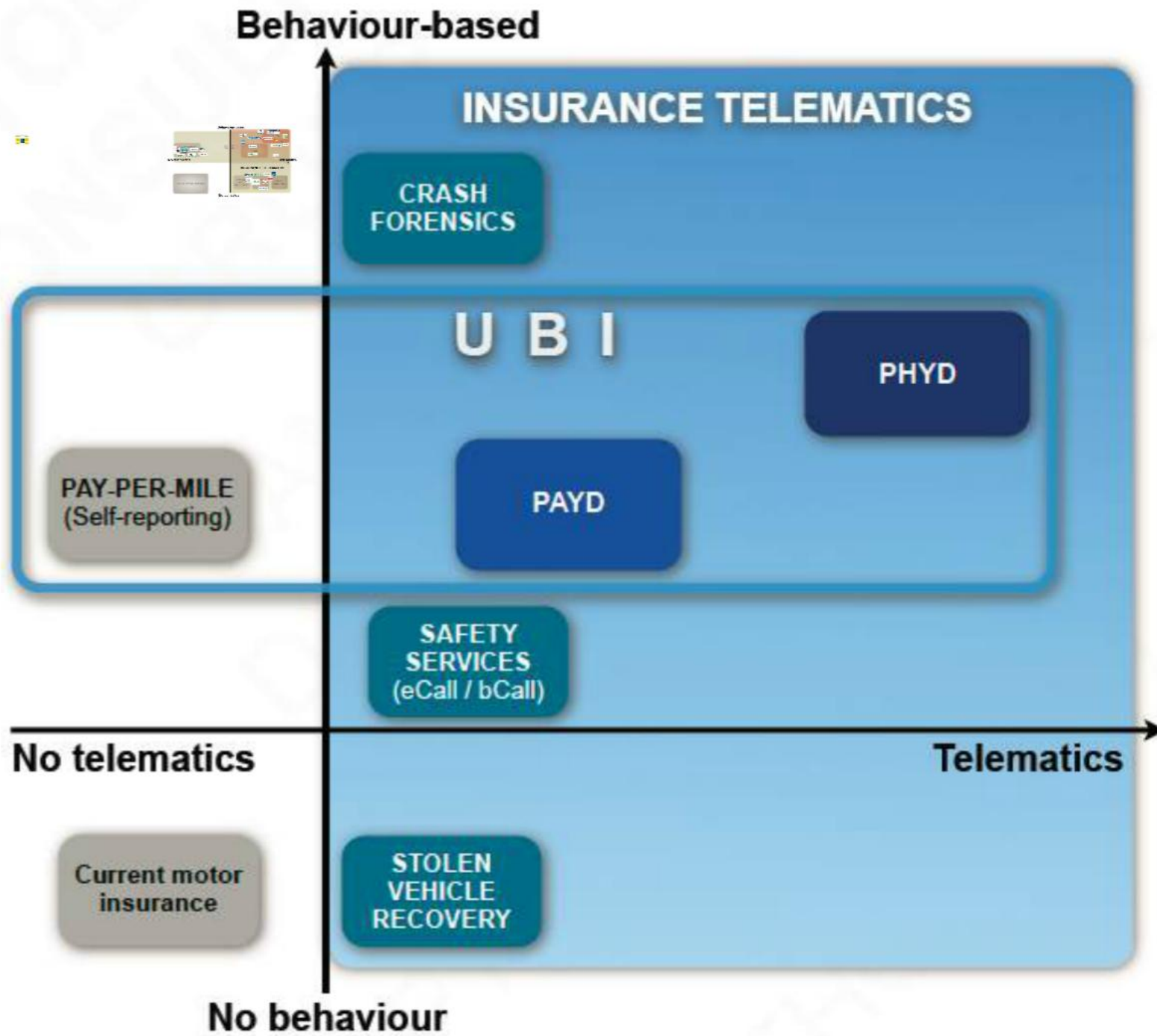
2 The device measures how well you drive



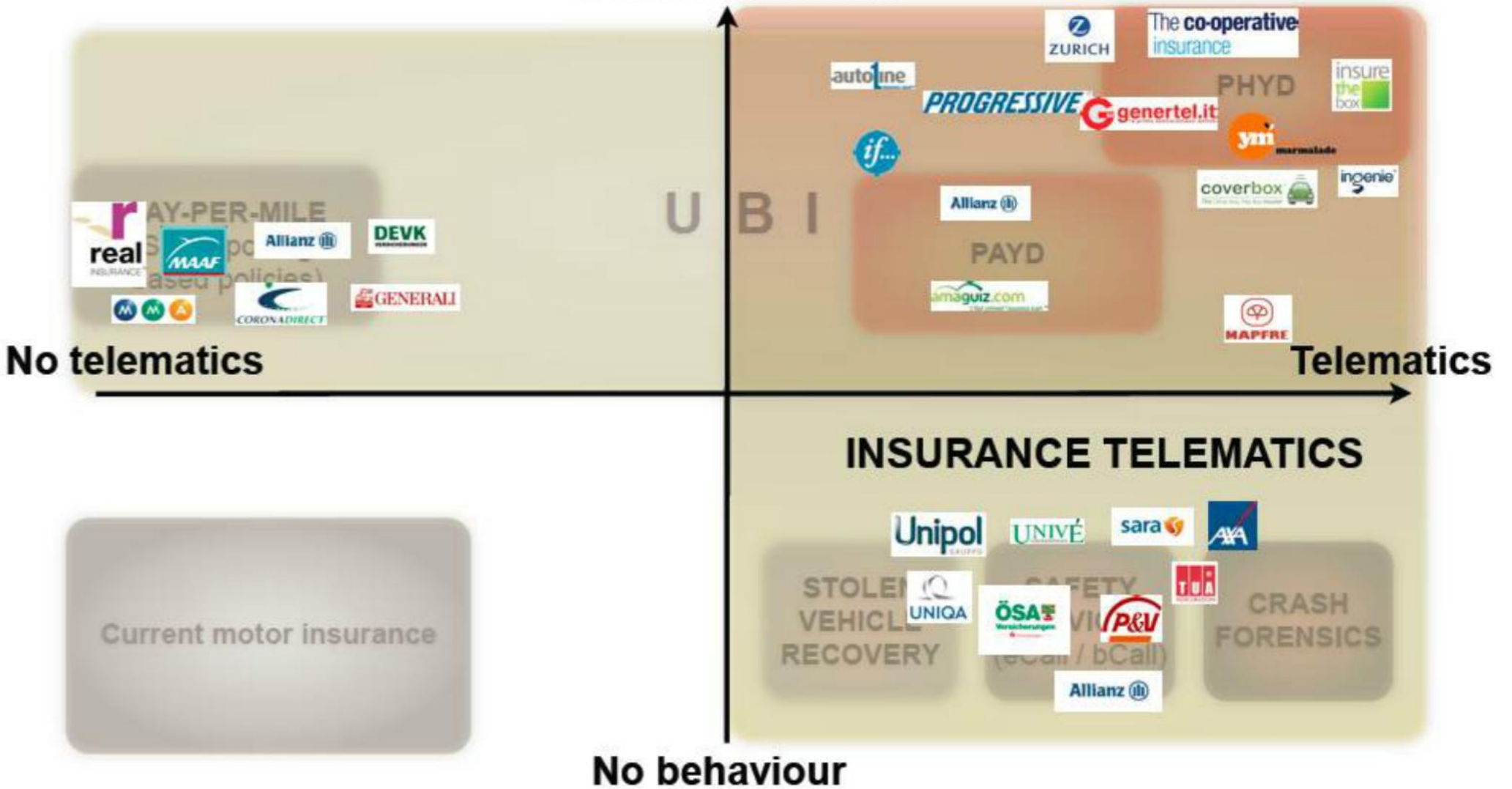
3 View feedback on how you're driving



4 Good drivers could save money on their car insurance



Behaviour-based



Comparison of UBI to traditional motor insurance

Traditional insurance

Annual or semi-annual policy

Premium based on rating factors e.g. age, gender, vehicle type, etc.

Actual usage of the car is not known

Limited customer contact

Commodity product

Connected Car



Image Source: http://www.broadcom.com/products/features/connected_car.php

UBI

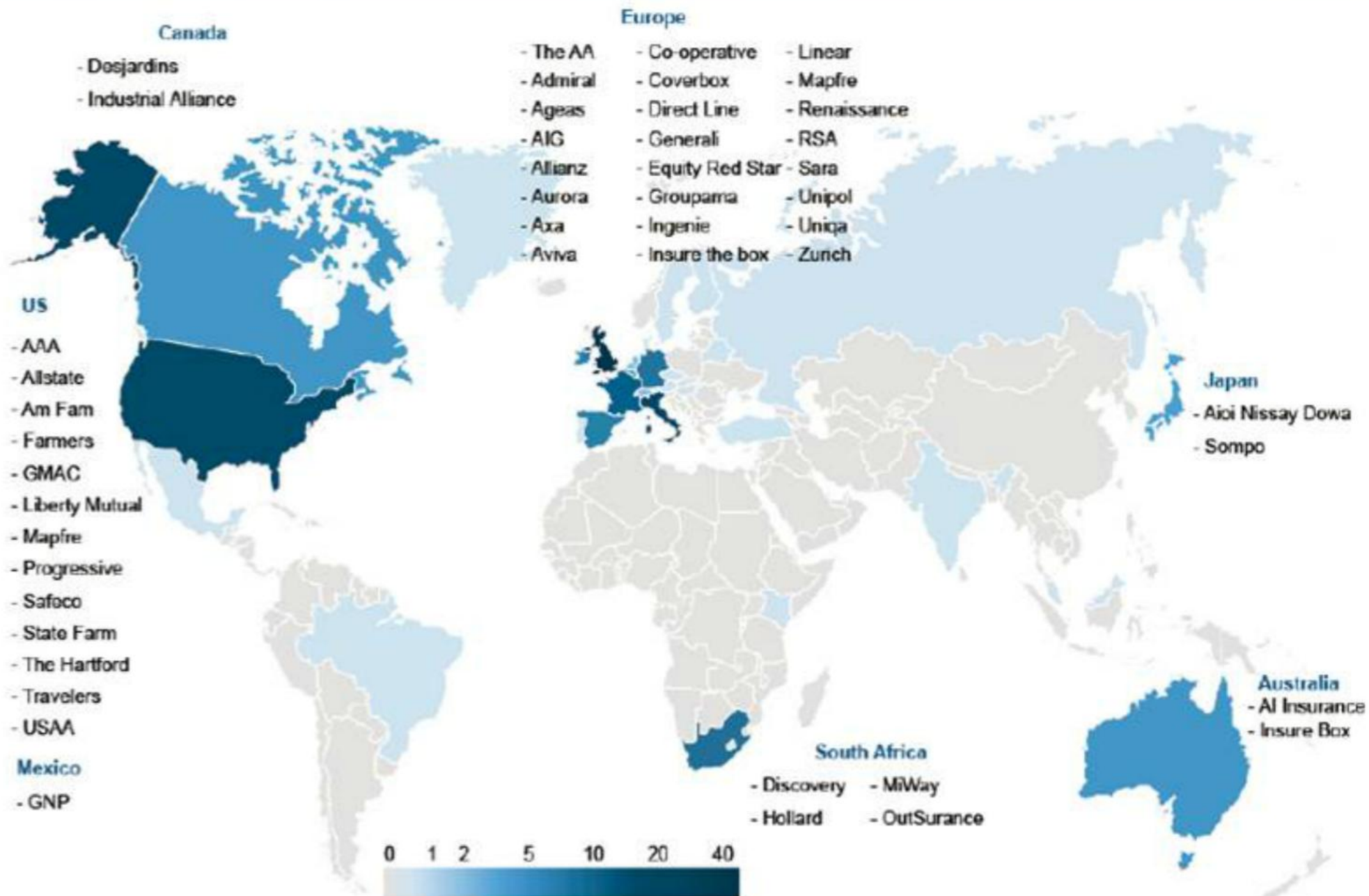
Pay-As-You-Drive
Personalized premium based on usage

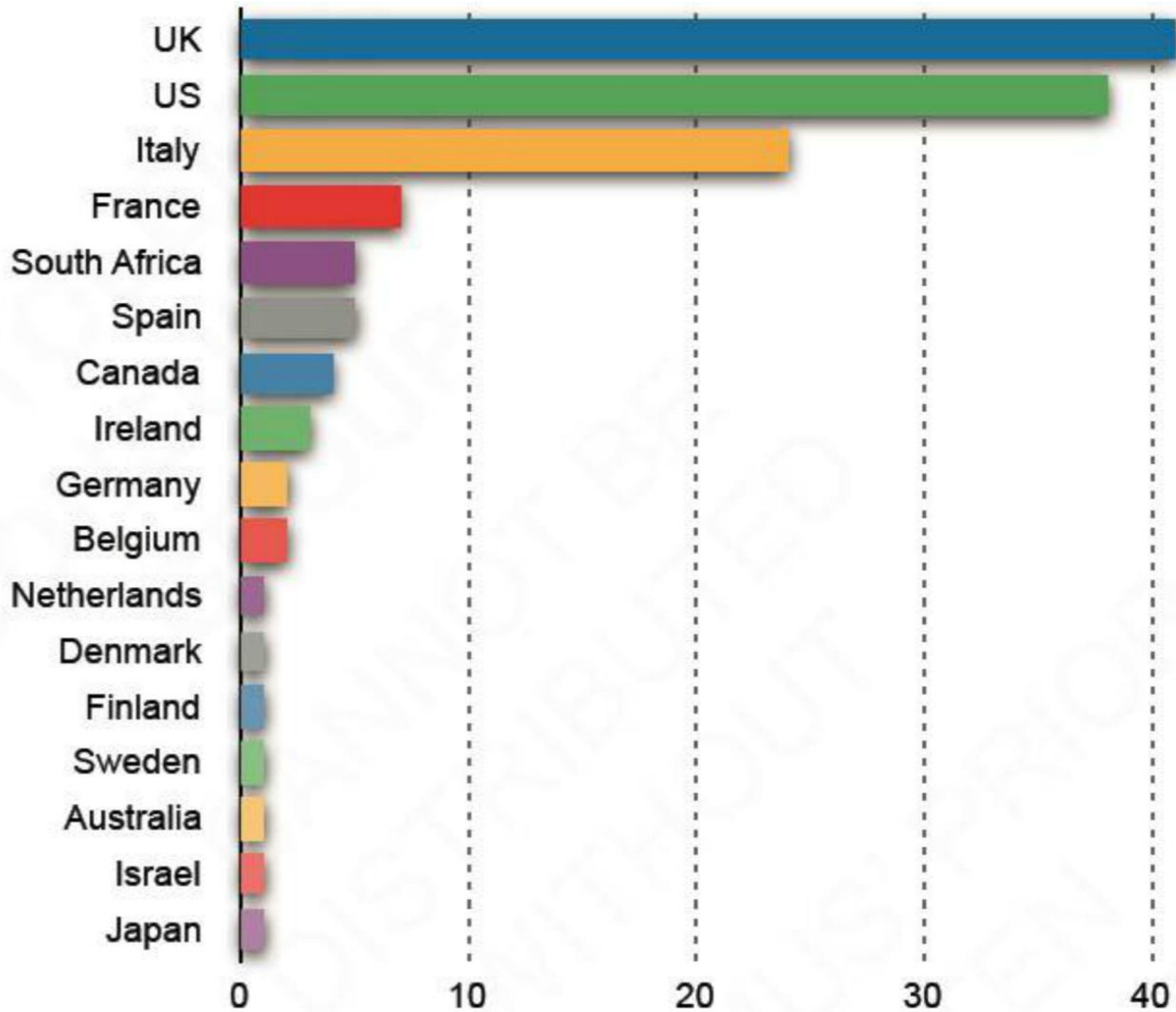
Pay-How-You-Drive
Based on Telematics device tracking

Know how the car is being driven, e.g. how fast, how often, when, where

Real-time connection with customer

Personalized product





Source: PTOLEMUS

Technological innovation

- Growth of telematics and in-car connectivity, partly driven by decreasing cost of operation
- Rapid increase in smartphone and mobile broadband penetration

Customer engagement & retention

- Traditionally product driven
- Customer driven - more tailor solutions for different segments
- More customer touch points that provide real value

BIG DATA

Growth drivers of Usage Based Insurance (UBI)

Regulations

Call
ERA
GLONASS

Declining profitability

Declining profitability



**Growth drivers of
Usage Based
Insurance (UBI)**

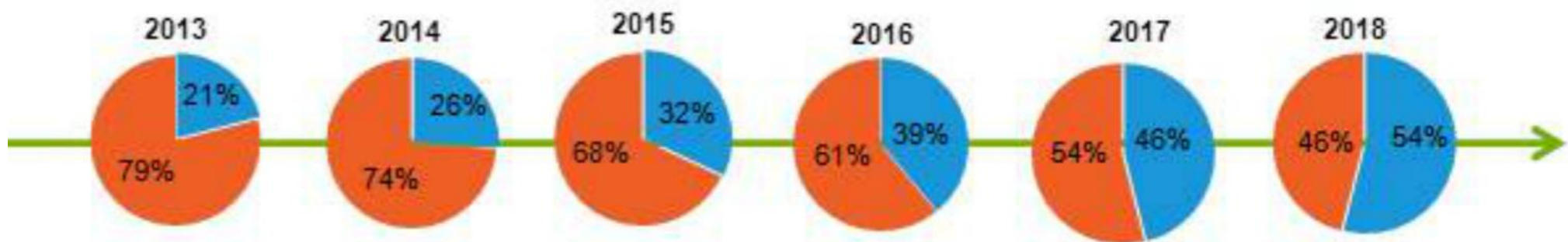
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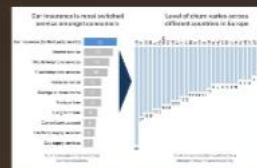
■ Smart devices and connections

■ Non-smart devices and connections



Customer engagement & retention

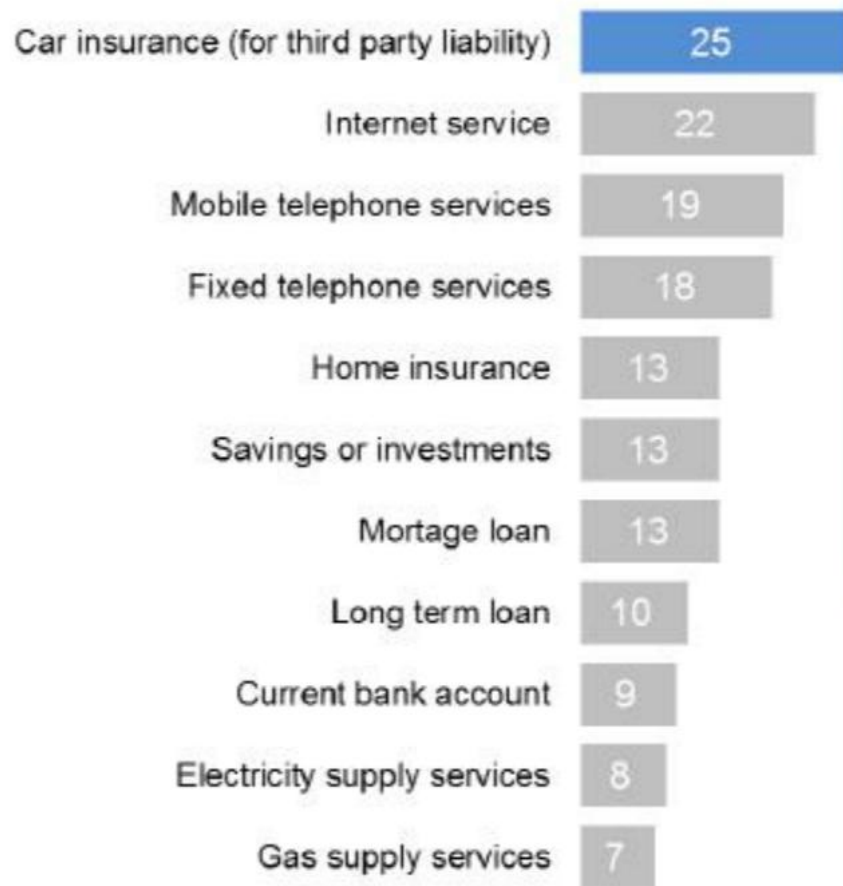
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Reasons why churn rates are rising

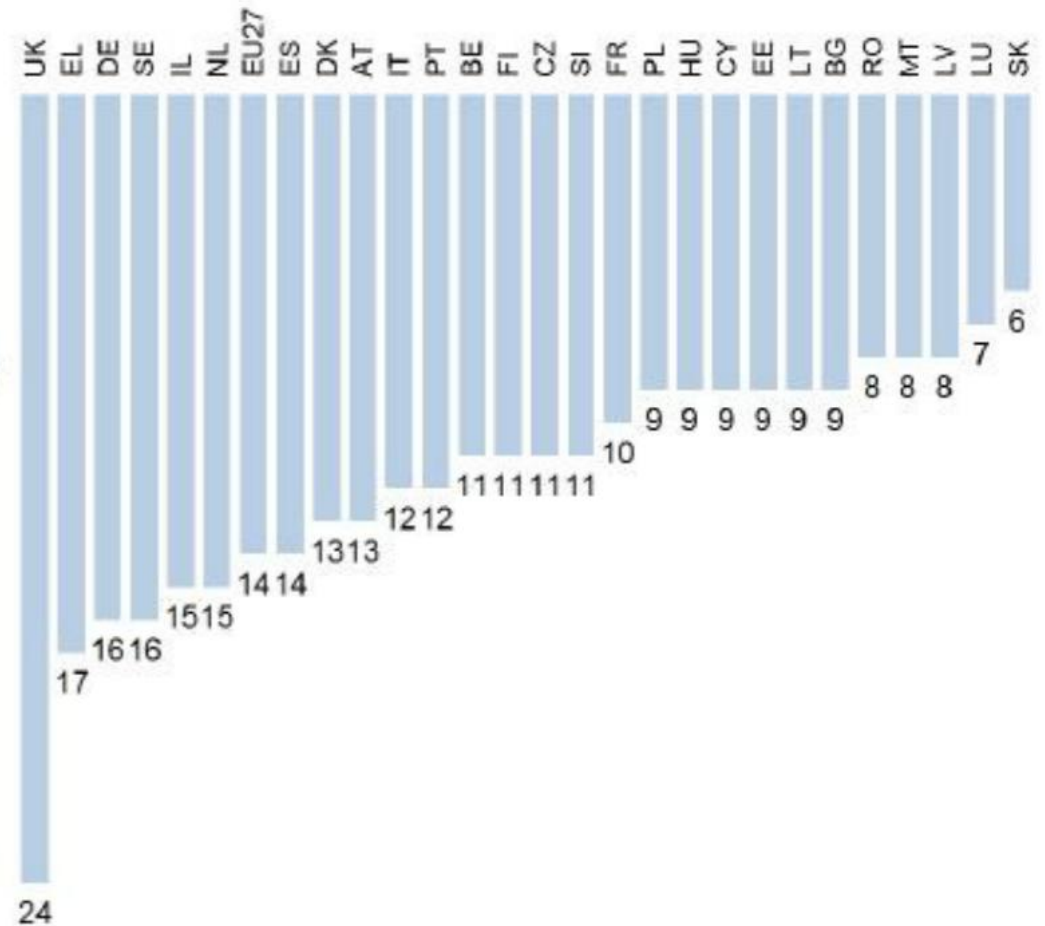
- High premium
- Price comparison sites
- Growing competition
- Limited customer relationship

Car insurance is most switched service amongst consumers



% of consumers that switched service providers

Level of churn varies across different countries in Europe



% of consumers that switched to a cheaper motor insurance policy

Reasons why churn rates are rising

- High premium
- Price comparison sites
- Growing competition
- Limited customer relationship

High premiums

As of 2014, the average premium for a 30-year-old male is \$1,200 per year, up from \$1,000 in 2010.

Price comparison sites

According to a survey by the Insurance Information Institute, 60% of consumers use price comparison sites to find the best deal on their policy.

Growing competition

In 2014, the number of companies offering life insurance increased by 10% compared to 2010, indicating a more competitive market.

Limited customer relationship

The average age of a customer's first policy is 25, and the average age of a customer's last policy is 65, indicating a limited relationship with the insurer.

High premiums

- **46% of Asian respondents claimed that price was also the main reason for switching motor insurers.**

Price comparison sites

- **Average 39% of Europeans have purchased motor insurance through comparison sites**
- **A larger percentage expects to make more use of comparison sites in the future.**

Growing competition

In 2010, the number of companies in the 32 countries that are full members of the European insurance and reinsurance federation (CEA) increased to around 5,350 compared to over 4,900 in 2009, despite the recession.

Limited customer relationship

The largest driver of lower satisfaction scores is in First Notice of Loss (FNOL) – when the customer first notifies the insurance provider of damage to their vehicle.

Declining profitability





Competition/market structure

Claims cost



Insurance margin



Regulations



merimen

collection and analysis of driver
behaviour data (DBD)



Claims management



UBI Benefits

Claims management



Underwriting



Ancillary services



Ancillary services



Underwriting/ pricing



UBI Benefits

Claims management



Underwriting



Ancillary services



Claims management






- Timely information to claim handler
- Nature, type and extent of the damage to the vehicle
- Early indication of bodily injury
- Increase accuracy of case estimation
- Reduce fraudulent claims



UBI - Accident Reconstruction



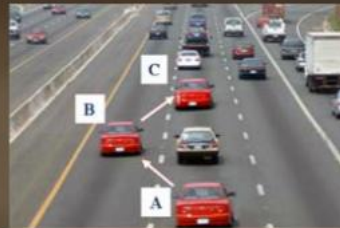
- 
- alarm activated
 - theft notified to the customer
 - provide vehicle recovery info to customer/police
 - help to avoid total losses



- instant crash/emergency notification
- send relevant emergency services to the confirmed location
- check customer record and contact family
- remain in contact with customer
- confirm arrival of emergency services



Underwriting/ pricing



Driving behavioural data captured by telematics devices provides valuable insights of the risk of the drivers

1

Event identification

Discover driving experience from data

Raw data

- ▶ GPS coordinates and driving time
- ▶ Acceleration / deceleration
- ▶ Start, park, hard cornering, hard brake events
- ▶ Distance and speed
- ▶ Braking
- ▶ Fuel consumption

Contextual data overlay

- ▶ Event environmental information
- ▶ Map GPS position to address, road type, etc.
- ▶ Weather information

Variables and rules example

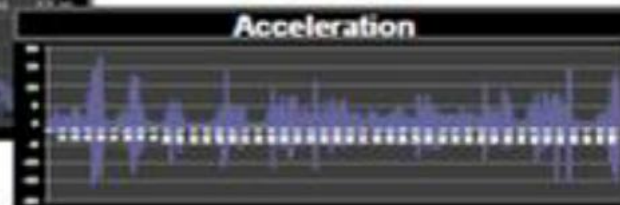
- ▶ Deceleration could be identified at various tolerance levels: Low-Medium-High
- ▶ High Deceleration Rule: "0.2 g-force deceleration in under 5 seconds"

2

Scoring

Score driving behavior

- ▶ Capture driving behavior: speeding, acceleration, braking
- ▶ Score events for each journey, aggregate and weight by journey/distance/duration

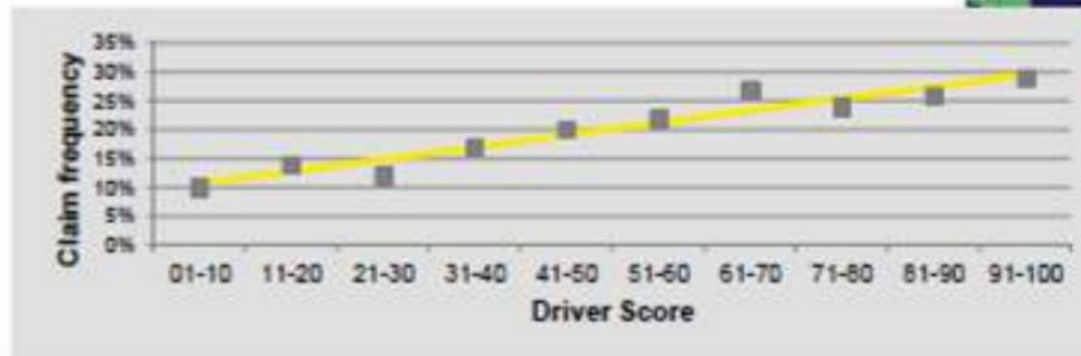


3

Modeling

Analyze correlation of score and claims experience

- ▶ Identify the scores with significant predictive power
- ▶ Compare and validate the emerging claims experience with the model output



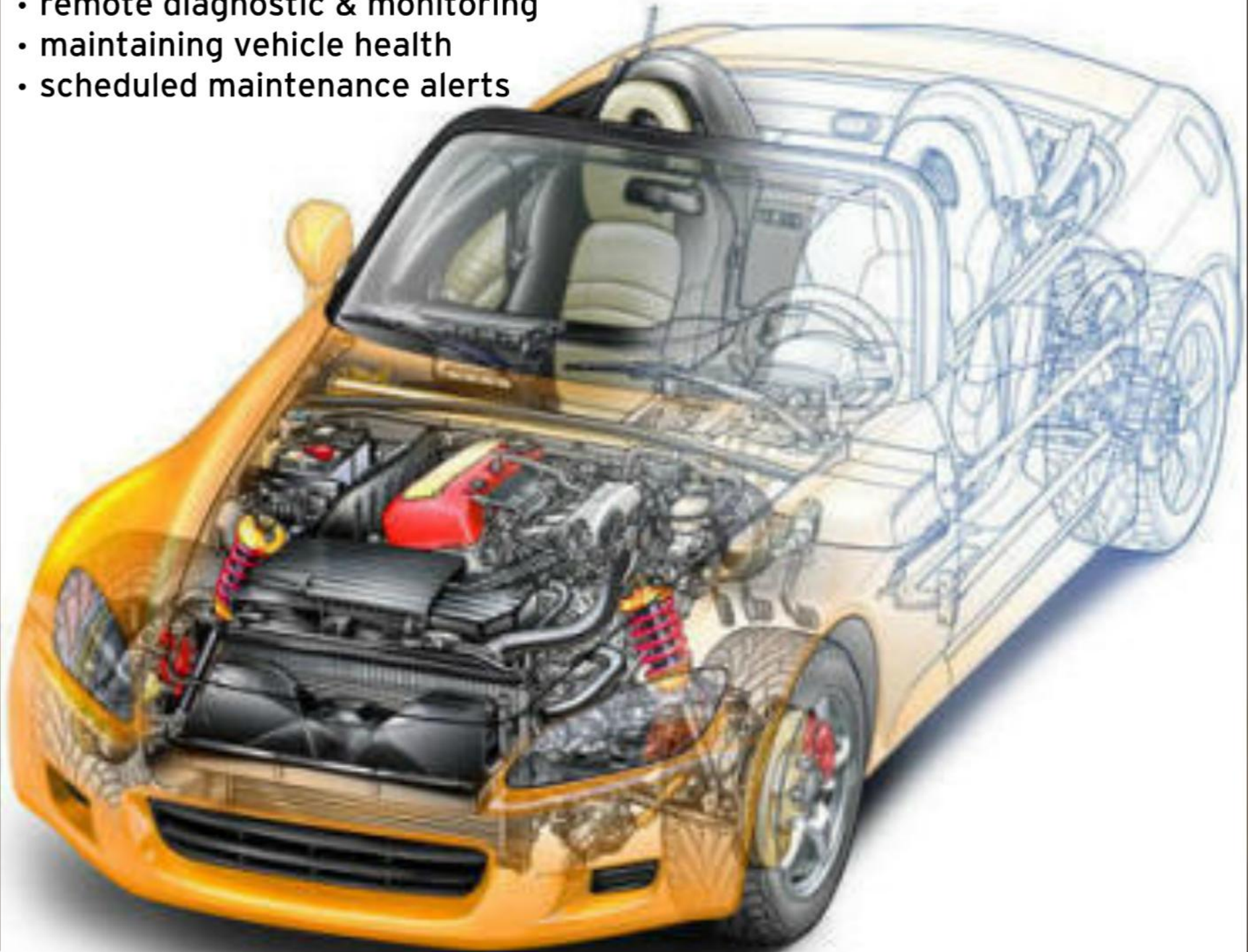
Ancillary services



- automatic breakdown call
- immediate roadside assistance



- remote diagnostic & monitoring
- maintaining vehicle health
- scheduled maintenance alerts



TAILGATERS

are motorists who drive closer than 1 second behind the vehicle in front of them

- feedback on driving habits and incentives for safer driving

79%
DRIVERS

said people driving too closely behind them annoyed them more than any other driving habit



44%
MOTORISTS
with

22%
RECEIVING
REAR-END
BUMPS

have had to brake sharply because of a sudden jam



due to ill-timed braking



1/3 MOTORWAY
CRASHES

that result in personal injury involve tailgating




40%
MOTORWAY
DRIVERS
tailgate

You should always allow at least

2-SECOND GAP



In-Drive Co-Pilot 

Know your family is
safe and where you
expect them to be.



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