Making the telematics business case work

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Research and Marketing Director

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PTOLEMUS in a nutshell

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 than 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**

- Distance
- Static criteria (statistical)
- Time
- Driving behaviour
- Place
There are many flavours of telematic insurance models

- **PAY-PER-MILE** (Self-reporting-based policies)
- **PHYD**
- **PAYD**
- **STOLEN VEHICLE RECOVERY**
- **SAFETY SERVICES** (eCall / bCall)
- **CRASH FORENSICS**
There are many flavours of telematic insurance models

- **Behaviour-based**

  - Pay-per-mile (self-reporting-based policies)
  - PAYD
  - PHYD

- **Telematics**

  - STOLEN VEHICLE RECOVERY
  - SAFETY SERVICES (eCall / bCall)
  - CRASH FORENSICS

- **Current motor insurance**

- **No telematics**

- **No behaviour**

What is UBI?
Fundamental barriers to UBI

- 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

Making the UBI business case
Fundamental barriers to UBI

- “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”

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

Insurers won’t make the first step
In all markets, there are specific challenges to telematics

<table>
<thead>
<tr>
<th>Challenges faced by insurers to launch UBI</th>
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</thead>
<tbody>
<tr>
<td>Italy</td>
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<tr>
<td>Business case</td>
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<tr>
<td>Technology solution</td>
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<tr>
<td>Marketing strategy</td>
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<td>Sufficient data for scoring</td>
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<tr>
<td>Channels</td>
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<tr>
<td>Customer privacy*</td>
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**Source:** PTOLEMUS - Note: * Or perception of privacy-related issues
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

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<th>Main driver / Owner</th>
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MTPL is Motor third party Liability. Casco: Casualty and Collision
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**New environment market drivers**

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We expect all statistical factors related to individuals to be forbidden within the next 10 years.
The technology range used in UBI is potentially very wide.

**Possible technologies for vehicle connected services**

- **Aftermarket**
  - Black box
  - Digital tachograph
  - FMS box

- **Line-fitted**
  - OEM system
  - Supplier system

- **Semi-embedded system**
  - OBD device
  - Self-energised connected modules

- **Fixed**
  - Cigarette-lighter device
  - DSRC tag

- **Removable**
  - Speed camera locator

- **Portable**
  - PND
  - Smartphone

- **Vehicle keys**
But only a few have been tested ...

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**Removable**
- Vehicle keys

**Portable**
- Motorcycle keys

Source: PTOLEMUS
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

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

Source: Unipol, PTOLEMUS
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

Source: Greenroad, Zurich, Have a Good Drive, Drivecam
Insurers are however not just an “other fleet”

Be ready to climb a big step

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

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

Source: Allianz, PTOLEMUS
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

Source: Autoline Insurance
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"

- 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

- 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

- 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

- 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

* Italy, the UK, France, Germany, Russia and the US
The first entrant’s advantage

Octo’s DB of drivers data

(in millions of miles of driver data)