

PTOLEMUS Consulting Group

Insurance Telematics Global Study

The ultimate reference on Pay As You Drive

May 2013 update



Who we are

PTOLEMUS
Consulting Group

- **The 1st international strategy consulting firm specialised in telematics, location-based services & mobility**
- **Strategy combined with real industry expertise and operational experience**
- **A focus on achieving results for our clients**
- **Close links with the mobility ecosystem**
 - Advisory Board Member of EENA⁽¹⁾
 - Member of ERTICO's⁽²⁾ eSafety Forum and eCall HeERO Observers Group
 - Close connections to national ITS organisations, ACEA⁽³⁾, ASECAP⁽⁴⁾, GSMA⁽⁵⁾, etc.
 - Speakers at most leading industry events & conferences
 - Regular contributor to Telematics Update
 - Steering Committee Member of Mobile Monday (Brussels)



from Ptolemy, the Egyptian savant who built the 1st map of the world in the 2rd century

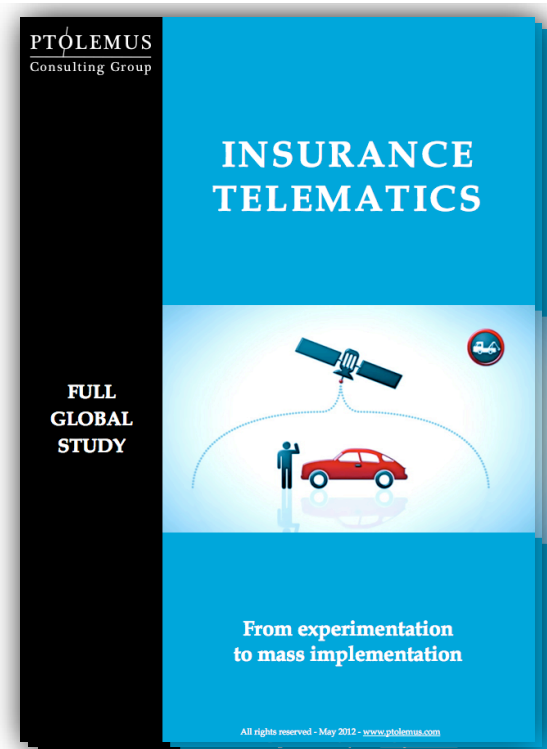
We created this study to give insurers, service providers and even OEMs an evolving reference guide to UBI



**Bridging the gap
between ideas
and realities**

- **We address all the angles:**
From the service strategy to the business model and privacy issues
- We analyse the market from an underwriters' standpoint but also looks at the OEM's and service providers perspectives
- **So the study can provide you ways to**
 - Leverage the learnings from 10 years and over 100 experiments worldwide
 - Get the complete story: strategy, marketing, business model, technical, legal, etc.
 - Make decisions swiftly based on verified facts & figures

The most comprehensive paper on Insurance Telematics



More than a research study, a real strategic market analysis

- **410 pages of analysis on the PAYD / PHYD market based on**
 - 83 interviews in 18 countries
 - 230 charts and tables
 - 2 years of hands-on experience
 - Our knowledge of the ecosystem incl. OEMs and TSPs
- **Case studies & learnings** from ALD Automotive, Amaguiz, Coverbox, Discovery Insure, GM OnStar, Hollard Insurance, Insurethebox, Liberty Mutual, MAIF-MACIF, Norwich Union, Octo Telematics, Progressive, Solly Azar, State Farm, Unipol, Uniqa, Zurich
- **A handbook of suppliers' solutions** including our own evaluation & ranking
- **A detailed profile of the key UBI services** provided globally
- **10-year market forecasts**
 - Markets' readiness to UBI
 - Country forecasts for the US, Italy, the UK, France, Germany and Russia
 - Bottom-up estimates of the number of policies for each insurer in the US, the EU and in South Africa
- **Insurer's telematics market models 4 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 effects of the gender ruling

We have interviewed over 80 companies in 18 countries including 30 insurers

Organisation	Country
Achmea	Netherlands
Airmax Group	
ALD Automotive	F
Allianz	F
Allianz	G
Allianz	
Amadeus Capital Partners	
Amaguiz (Groupama)	F
Aplicom	F
Arval	F
Aviva	
Axa	B
Axa Assistance	F
Bird & Bird	F
Cesar Satellite	F
CNIL	F

Organisation	Country
Cobra Automotive	France
Continental	
Covea	
Coverbox	
Crédit Mutuel	
Cybit	
Daimler Insurance Services	
ERTICO - ITS Europe	
European Commission	
Generali	
Generali Group	
Greenroad Technologies	
Hughes Telematics	
ING	
Lysanda	
MACIF	

Organisation	Country
MAIF	France
Masternaut	
Metaskil	
Michelin	
Mobile Devices	
Navteq	
Norton Rose	
Octo Telematics	
Qualcomm Enterprise Services	
SAP	
Scope Technologies	
Sensomatix	
Skymeter	
Standard & Poors	
Stok Nederland	
Telit	

Organisation	Country
Telogis	USA
Texa	Italy
The Co-operative Insurance	UK
TomTom Business Solutions	UK
Touring	Belgium
Toyota	Belgium
Trimble MRM	UK
Uniq	Austria
Vivium / P&V	Belgium
Vodafone	UK
Wireless Car	Sweden
Wunelli	UK
Young Marmalade	UK
Zurich Financial Services	France
Zurich Fleet Services	UK
Zurich	Italy
Zurich	UK

410 pages of facts, figures, examples, case studies, forecasts and recommendations

LIST OF FIGURES

I. OVERVIEW OF THE PRESENT ENVIRONMENT

Overview of insurance telematics

- What is insurance telematics?
- UBI vs. insurance telematics
- SWOT analysis of the 3 main rating models
- A European perspective on insurance telematics

Key features of the motor insurance market

- A maturing business
- Increasing churn
- Rising claim costs
- Limited investment income
- The advent of online distribution
- Sustainability of the mutualisation model

II. TELEMATICS-ENABLED INSURANCE: THE NEXT STAGE?

Telematics is now an impending necessity

- The benefits of telematics
- Telematics will come from competition

Why telematics will grow faster than ever

- Technological drivers
- Economic drivers
- Regulatory drivers

The mystery of PAYD – why it has not taken off yet

- Challenges for insurers
- Challenges for consumers
- What this means for the future

III. THE INEVITABLE INSURANCE REVOLUTION

What has the industry learned?

- Learnings from the pioneering insurers
- Learnings from Italy's telematics take-off
- Synthesis of the learnings from the past

Reinventing the motor insurer

- Building a comprehensive customer value proposition
- Becoming an ISP (Insurance Service Provider)
- Designing a privacy-enabled service
- Raising the awareness and education of commercial channels
- Building a customer-centric service
- Fastening the time-to-market
- Building closer relationships with automobile manufacturers

Welcome to the kingdom of big data

- Tell me the (ground) truth!
- The challenges of big data
- Data to the people
- Will data become a barrier to entry?

The impact of telematics on risks

- The 3 miracles of telematics
- The benefits of a driver-behaviour programme
- Leveraging telematics data on the existing book
- Using telematics-based pricing to reduce risks

IV. BUILDING THE TECHNOLOGY SOLUTION

Defining its technology strategy

- Selecting the technology
- Defining a purchasing strategy
- The key selection criteria
- The future integration of telematics into the IT system

Selecting its technology supplier(s)

- The landscape of suppliers
- Handbook of suppliers
- Our evaluation of suppliers

What are the key supply issues?

- How important is the hardware?
- What is the winning hardware combination?
- What are the new differentiating features?
- Will we head towards leasing models for telematics hardware?
- What are the specific supply issues for commercial insurers?

V. STRATEGIC EVOLUTION OF THE INDUSTRY

The telematics opportunity

- The insurance telematics value chain
- The global telematics battlefield

The Original Equipment Market

- OnStar showed the way
- The growing interest of OEMs in insurance
- The nascent involvement of OEMs in insurance telematics
- The challenges
- Competition issues
- TSPs on board?

The aftermarket

- A changing value chain
- Movements in the telematics industry

Embedded or installed?

- State Farm, the aftermarket against the OEM
- Evolution of the European market

VI. THE INSURANCE TELEMATICS MARKET POTENTIAL

The business case for mass implementation

- The typical business case for an insurer
- Country operator business case studies

Is the market mature for telematics?

- Readiness of European markets to telematics
- Readiness of other markets to telematics
- The changing face of insurance telematics

The personal line insurance market potential

- Current market size
- Expected growth
- The importance of Value Added Services

The commercial insurance market potential

- Current market size
- Expected growth

PAYD / PHYD, a major opportunity for insurers

The market potential for third parties

- The market opportunity for Telematic Service Providers
- The market opportunity for Telematics Technology Providers
- The market opportunity for mobile operators

VII. CONCLUSIONS AND RECOMMENDATIONS

Conclusion

Recommendations to insurers

- Finding the right value proposition for consumers
- Multiple deployment strategies
- Business model
- Why now?

Recommendations to governments and regulators

Recommendations to telematic solution providers

Recommendation to automotive OEMs and suppliers

Recommendations to mobile operators

Over 230 charts, diagrams, illustrations and tables

Customer lifetime cash flows for the insurer - UK

The telematics customer NPV explained - UK

£
900
600
300

Figure: Estimated premium loss by rating factor in the US market (2010)

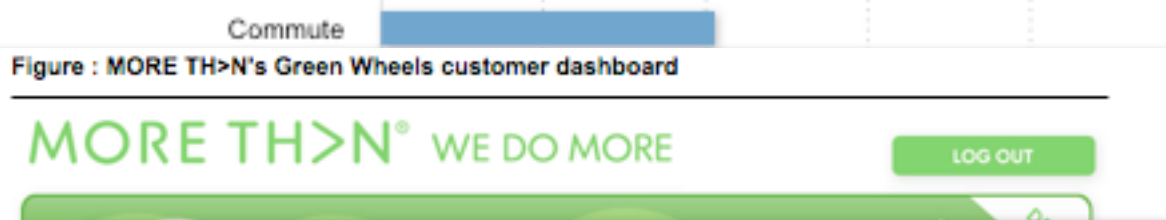


Figure : MORE TH>N's Green Wheels customer dashboard

Figure : Progressive notices significant improvements in customer retention and satisfaction through telematics

Retention index Net Promoter Score

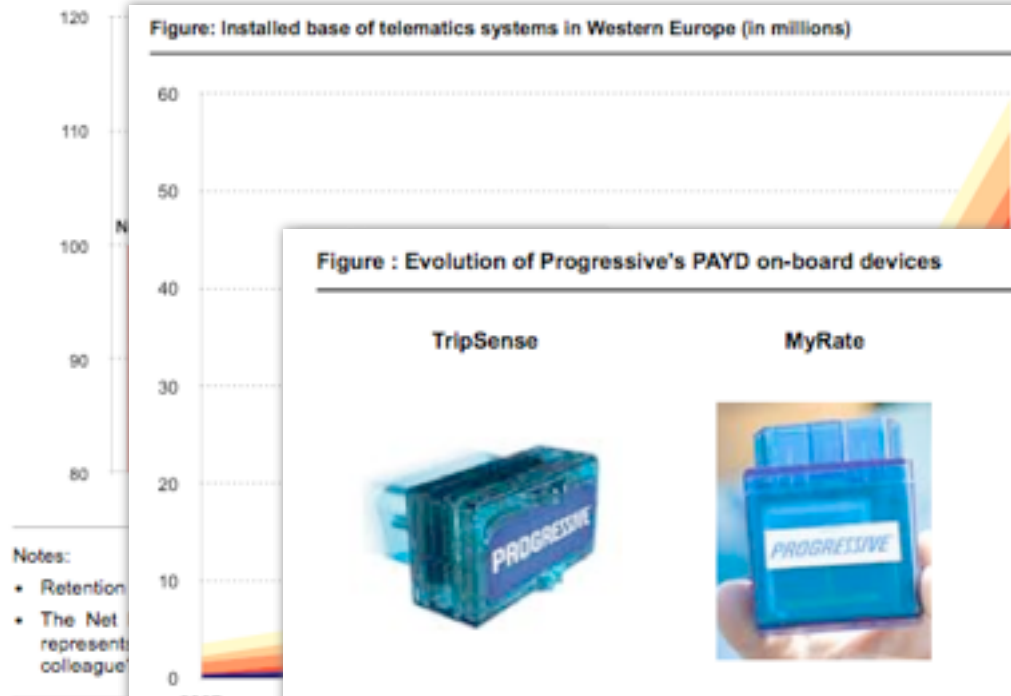


Figure: Installed base of telematics systems in Western Europe (in millions)

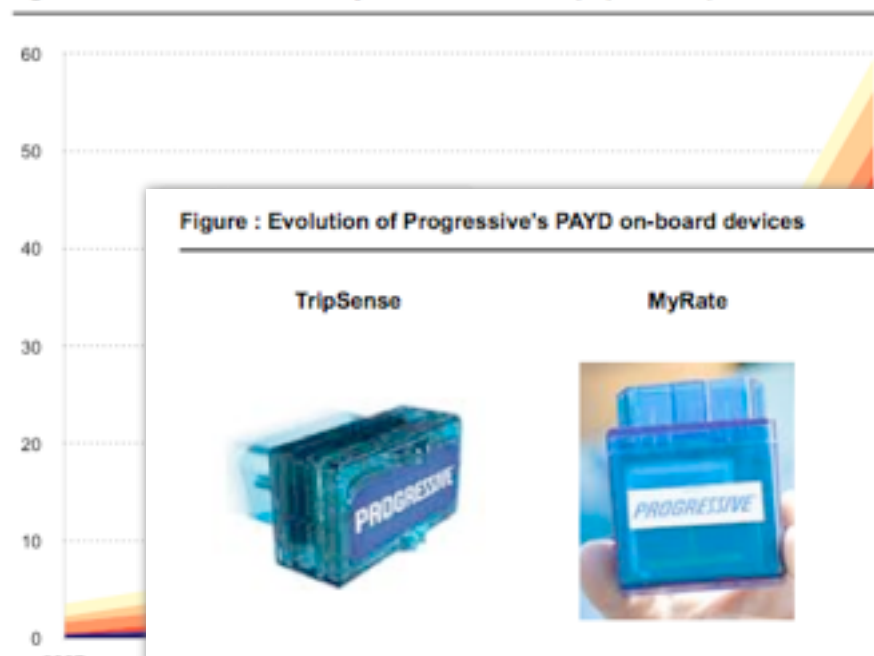


Figure : Evolution of Progressive's PAYD on-board devices



Source: PTOLEMUS

Note: Does not include smartphone-based systems
Source: PTOLEMUS

Figure : Learnings for insurers

Insurer	Factors of failure	Success factors	Customers acquired per year
	<ul style="list-style-type: none"> ★ Upfront fees for the device and the installation ★ Complex tariffing scheme 	<ul style="list-style-type: none"> ★ Technical trial 	

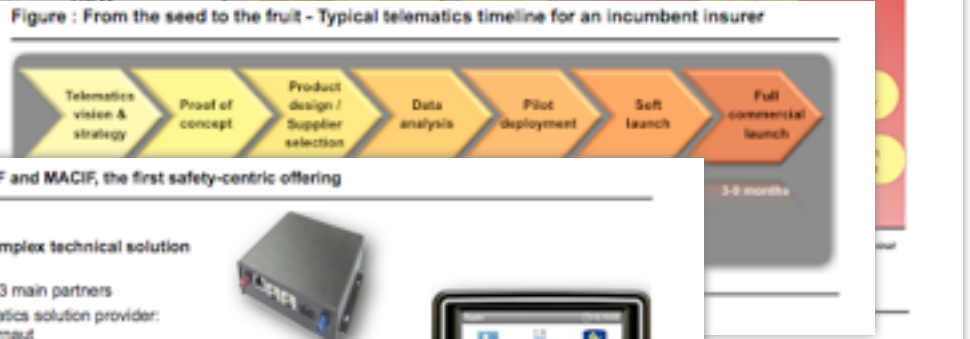


Figure : MAIF and MACIF, the first safety-centric offering

A full but complex technical solution

- Selected 3 main partners
 - Telematics solution provider: Masternaut
 - Connectivity provider: Bouygues Telecom
 - Assistance partner: Inter

EMUS

The report includes the evaluation of 60 suppliers globally and the detailed presentation of 13 solutions

Global rankings of telematics suppliers

	Personal line	Commercial line
Europe	Mobile Devices	Aplicom
North America	Danlaw	Mobile Devices
Other continents	Scope	Mobile Devices

The most complete analysis of technology

- 70-page analysis of technology solutions and purchasing strategies
- 100-factor purchasing checklist
- Market shares of suppliers globally
- An analysis of the differentiating features and services
- A list of 40 applicable patents
- OBD vs. OBU

13 supplier solutions detailed

PTOLEMUS Consulting Group

Section IV - Building the technology solution

QUALCOMM

Qualcomm Enterprise Services is a unit of Qualcomm, Inc., a global technology player with revenues of \$13 billion.

Qualcomm Enterprise Services has 20 years of experience as a TSP and more than 1.5 million embedded active terminals. It has over 2,000 customers in 39 countries. It operates end-to-end services as well as services for OEMs such as fleet.

It has entered the insurance information market in 2010. Its solution includes (TOD, PTO), crash management services and value added services for the end-user.

Life cycle	Consumer & commercial markets	Price	+ETD	Image	
Type	Fleet dash box	Installation	Professional		
Dimensions (cm)	15.8 x 6.3 x 3.8	Height (cm)	N/A	Operating temperature	N/A
Supported	N/A	Output connectors	K-line, Serial, USB, CAN	Hardware switching	N/A
Processor	N/A	RAM	N/A	Data storage	Flash memory 512 kb
Transmission technology	2G / 3G	Positioning technology	GPS	GPS antenna	External (optional)
Battery	✓	Battery capacity	N/A	Accelerometer	✓
Software platform	Proprietary	Open API	N/A	Seat	✓
CAN bus connector	✓	OBD connector	✓	Display	✓
Remote updates	✓	Location data	Collected	Transmission frequency	Programmable
Markets	Hardware (OEM source)	Power consumption (mA)	N/A	Certification	N/A

Rating factors measured

Acceleration, braking, lateral movement, duration of trip, time of day, distance, road type, fuel time and global start/stop cycle, etc.

Value added services supported

Fuel Tracking, parental monitoring tools, eco-driving, driving score and style analysis

Services provided to the insurer

✓	✓	✓	✓
✓	✓	✓	✓
✓	✓	✓	✓
✓	✓	✓	✓

Customer technical support, repair / OBU replacement, 24/7 customer care center, hotline in 3 languages

Customer references

Bankersy, Group Wain, Hellen, Hermes, Lantini, Neco, Nansen, Soverani, Phone Express, Transporte Sector, W&B Beta

Zurich Fleet Intelligence

Summary

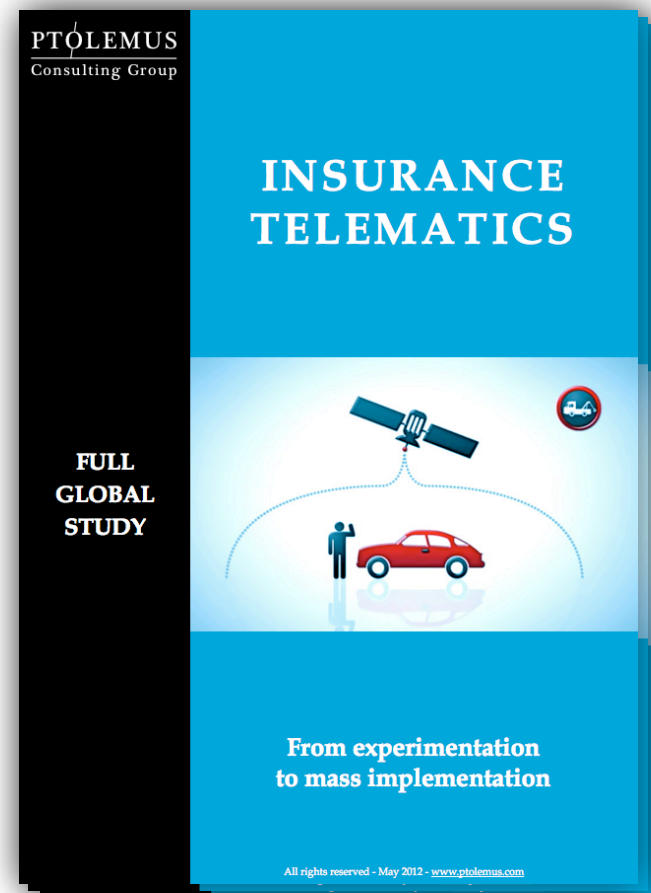
Strengths	Weaknesses
<ul style="list-style-type: none"> • High level of services provided to the insurer, reliability to 24/7 customer care center and its multi-product services • Installation services are provided • Long experience of handling major accounts in fleet management • Strong presence in the fleet and automotive domains (notably for OEM) 	<ul style="list-style-type: none"> • Limited experience with insurers

An in-depth market forecasts of UBI that you can rely on

- 10 year (2010-2020) market forecasts
 - Built bottom up (over 1 600 rows)
 - Using latest available market figures
- A comprehensive analysis & decision-making tool
 - 4 technologies (embedded OBUs, aftermarket OBUs, OBD, smartphones)
 - 7 areas: USA, France, Germany, Italy, UK, rest of EU, Russia, Rest of Europe
 - 2 channels (aftermarket / OEM)
 - 2 markets: personal line / commercial line
- Market size (volumes & revenues) for insurers, TSPs, TTPs, OEMs and MNOs



The study is a searchable PDF for the whole company



More than a research study, a real strategic market analysis

STUDIES	Full Study	Full Study with 10-year market forecasts
<p>Contents</p>	<ul style="list-style-type: none"> • 410 pages • Electronic version (pdf format, password protected) 	<ul style="list-style-type: none"> • 410 pages report • Electronic version (pdf format, password protected) • Excel market forecasts with graphs (password protected)
<p>Company-wide licence</p>	<p>€ 4 995 <i>Approx. \$6 995</i></p>	<p>€ 5 995 <i>Approx. \$7 600</i></p>

More options are available, contact thallauer@ptolemus.com to discuss

The biggest names in the industry testify:



“Octo Telematics is probably the best informed UBI solution provider globally.

However, we decided to purchase **PTOLEMUS’ Insurance Telematics Study**, which analyses this market in an **unprecedented breadth and depth**.

We believe it is a **must-read guide for any insurer or supplier** that is serious about its insurance telematics plans.”

Giampiero Luccitti
Director of Corporate Development
Octo Telematics



“Danlaw serves many insurers in North America; yet, to continue our growth, we need to penetrate other markets. As a 300 person engineering company with scant marketing resources, we rely heavily on external research.

The Global Insurance Telematics Study provides **the most comprehensive analysis of the trends, players, devices, and potential**.

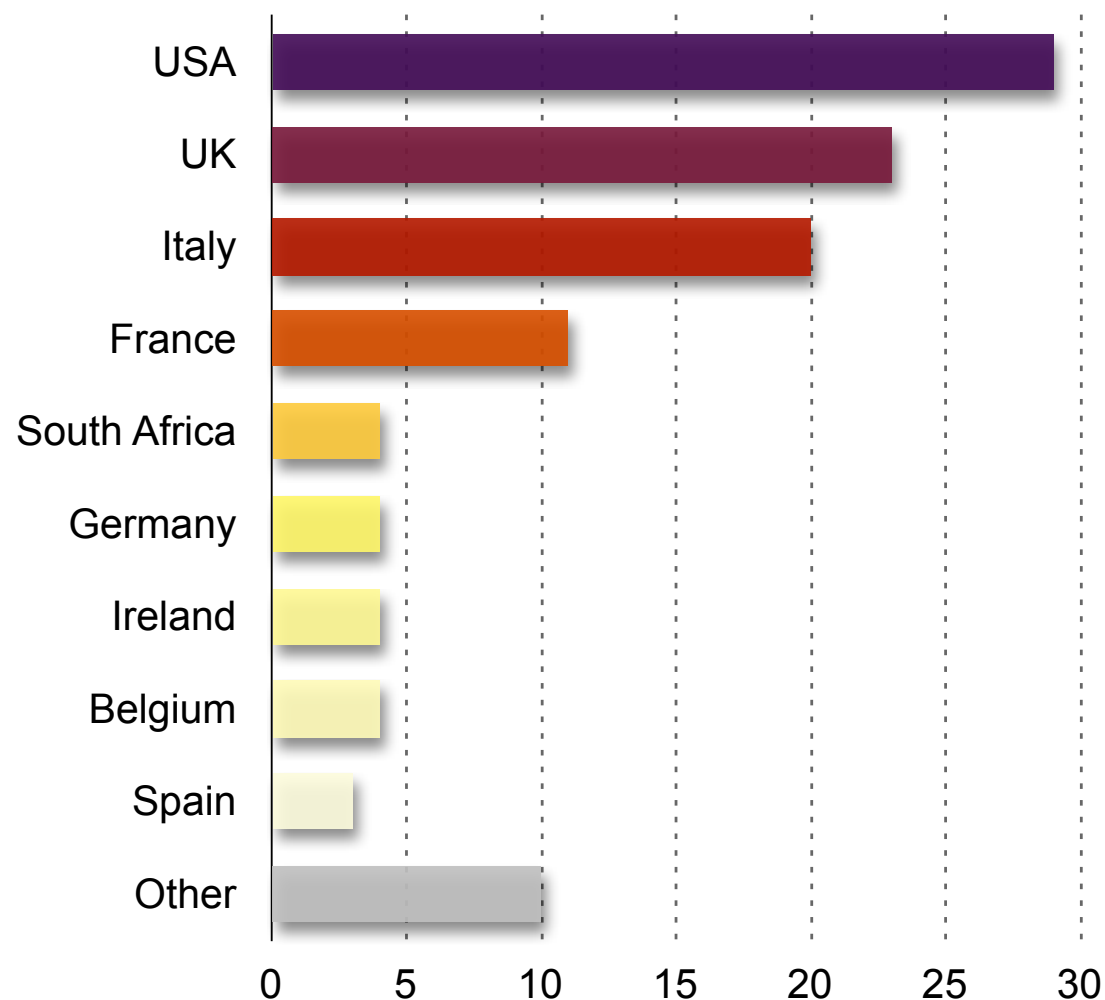
We will align and prioritize our staffing, research, and partnership agreements accordingly.

Worth every Euro.”

Mike Carroll
VP Sales, Telematics
Danlaw, Inc.

Insurers are becoming more mature about PAYD

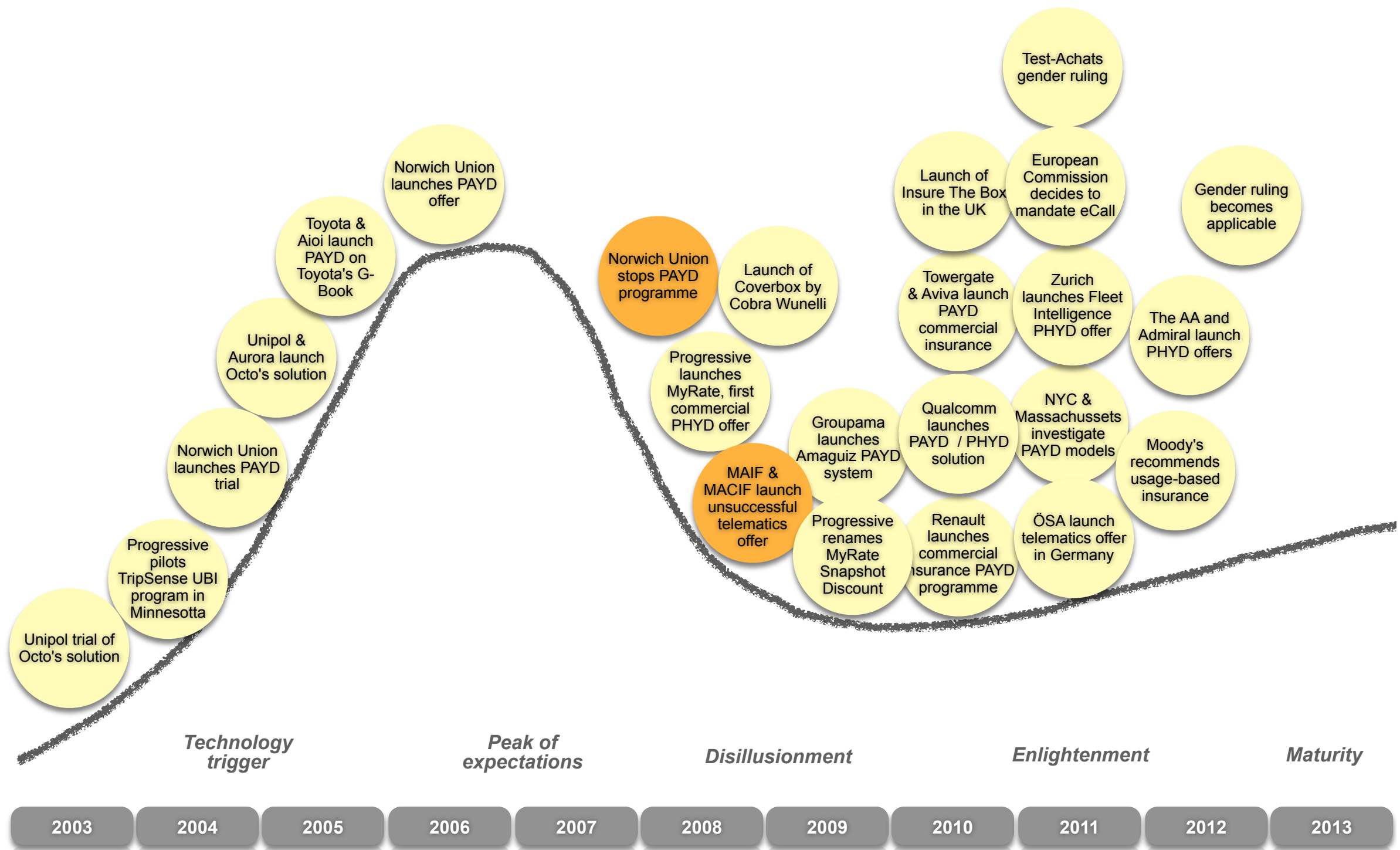
PAYD trials & launches globally



PAYD has passed the trial phase

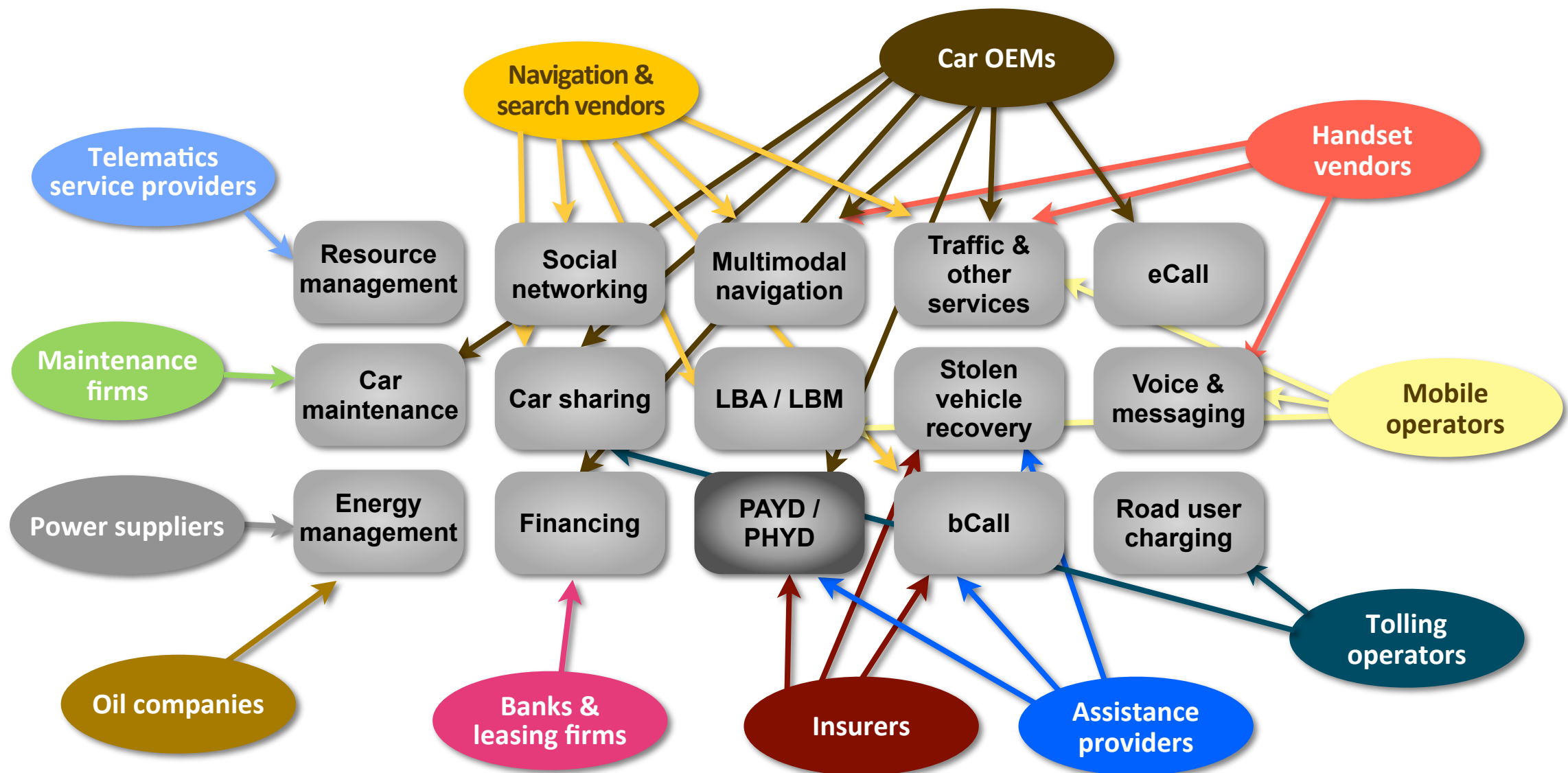
- 94 trials worldwide (67 in Europe)
- 54 commercial launches (40 in Europe)
- **Success stories in multiple countries**, notably Italy (Unipol), Spain (Mapfre), France (Groupama), the UK (Coverbox), Austria (Uniqa) and the US (Progressive)
- Overall, we estimate **PAYD-equipped vehicles at over 2 million** (worldwide)

In our view, the time has come for insurance telematics

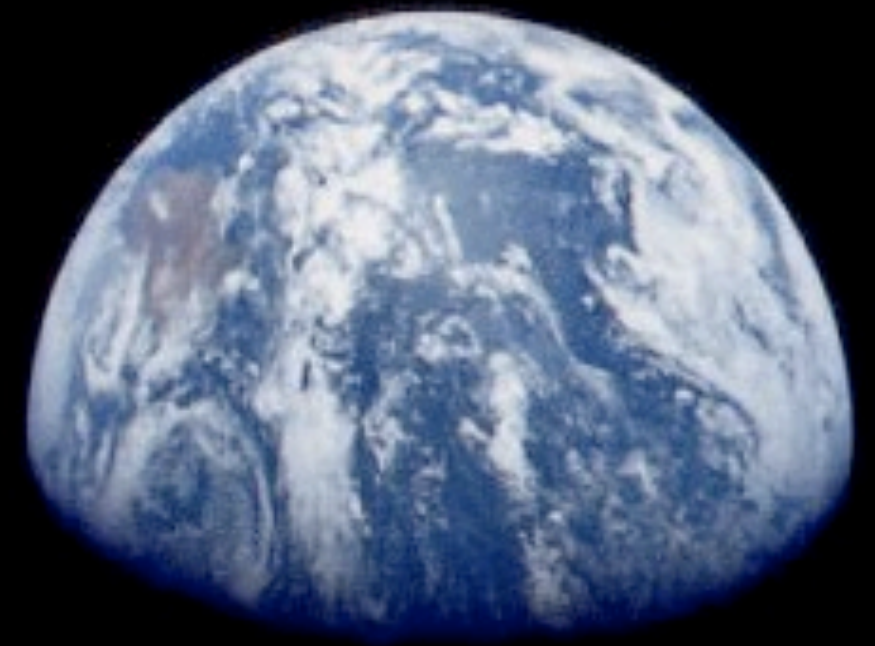


Connectivity is changing everything - Numerous players will be tempted to offer PAYD insurance

Connected car services



PTOLEMUS Consulting Group
Strategies for Mobile Companies



Find out more today!
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