PTOLEMUS Consulting Group

Usage-based Insurance Global Study 2016



Presentation of the 3rd edition

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

Our consulting services

Strategy definition

Vision creation, strategic positioning, business plan development, board coaching & support

Investment assistance

Strategic due diligence, market assessment, feasibility study, M&A, postacquisition plan

Procurement strategy

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

Innovation management

Value proposition definition, product & services development, architecture design, assistance to launch

Business development

Partnership strategies, detection of opportunities, ecosystembuilding, response to tenders

Implementation

Deployment plans, complex / high risk project & programme management, risk analysis & mitigation strategy

Our fields of expertise

Car infotainment & navigation

Connected services (Traffic information, fuel prices, speed cameras, weather, parking, points of interest, social networking), driver monitoring, maps, smartphone integration, smartphone-, PND- or embedded navigation,

Usage-based charging

PAYD / PHYD insurance, road charging / electronic tolling, fleet leasing & rental, car sharing, Car As A Service, etc.

Telematics & Intelligent Transport Systems

ADAS, connected vehicle, crowd-sourcing, fleet management, eCall, bCall, SVR, tracking, vehicle data analytics (OBD / CAN-bus), VRM, V2X, xFCD

Positioning / Location enablement

M2M & connectivity



Not just the most comprehensive report on UBI, but the biggest ever written study on telematics



- 1000+ pages of research using:
 - 286 interviews in 28 countries
 - 5 years of research performed by6 consultants in 4 countries
 - Insights from 25+ consulting projects
 - Our experience & vision of the ecosystem incl. OEMs and TSPs
 - 422 figures (charts, tables, etc.)
- 42 case studies including Allianz, AllState, Carrot Insurance, Vodafone Auto, Ingenie, OnStar- Progressive, Discovery Insure, Liberty Mutual, Octo Telematics, Renault Amaguiz, State Farm, Unipol, Zurich
- A handbook of 69 suppliers' solutions including our own evaluation and ranking

- 28 insurance markets profiled
- 2020 & 2030 market forecasts
 - Canada, US, Latin America, Europe, Russia, South Africa, India, Chinese and Japan
 - Personal line / commercial line
 - Aftermarket / OEM
- Analyses of the disruptive forces at play
 - ADAS and autonomous vehicles
 - The eCall & ERA Glonass mandates
 - The rise of smartphone apps
 - Big Data & analytics
 - Targeted recommendations for insurers, regulators, TSP, OEMs and operators



4 of the 8 authors of this report combine 60 years of experience in the automotive, telematics and connected services

Frederic Bruneteau, Managing Director, Brussels (fbruneteau@ptolemus.com)



Mr. Bruneteau has accumulated nearly 20 years of experience including 17 years of experience of the mobility domain and 8 years of strategic and financial advisory for companies such as Arthur D. Little, BNP Paribas, SFR Vodafone and TomTom.

He has become one of the world's foremost experts in the field of telematics, quoted by numerous publications such as *The Economist* and *Reuters*. He has spoken at more than 20 international conferences on the subject.

Matthieu Noël, Consultant, Paris (mnoel@ptolemus.com)



Matthieu Noël has gained 6 years of experience in the automotive industry covering technical, strategy, marketing and business development, including more than 4 years in consulting.

Mr Noël has performed more than 20 assignments in the automotive and telematics industries. He understands the business and strategic implications of new technologies in the mobility eco-system and can adapt quickly to new industries and situations.

Sergio Tusa, Associate Partner, Milan (stusa@ptolemus.com)



Sergio Tusa has gained over 20 years experience in the telematics, location-based services and automotive domains.

Before PTOLEMUS, Sergio held management responsibilities with Magneti Marelli (Fiat Group), Cobra Automotive, Nokia, Tele Atlas and Philips.He has led several insurance telematics and stolen vehicle recovery projects, for clients such as Cobra, Ferrari, Fiat and Renault/Volvo Trucks.

Thomas Hallauer, Director of Research & Marketing, London (thellauer@ptolemus.com)



Thomas Hallauer has gained 12 years of marketing experience in the domain of telematics and location-based services. He is an expert in new products and services notably in the telematics, motor insurance, electronic tolling and positioning industries.

Before PTOLEMUS, Thomas held management responsibilities with Mobile Devices, a leading provider of telematics technology platform and devices and with FC Business Intelligence (Telematics Update).



Based on interviews of more than 200 new companies in 30 countries including 86 insurers & brokers

	Organ	isation	Country					_			
	B	MW I					J	Company name	Country	Sector	
	Bouyane	s Telecom	Company name	Country	Sector			Generali France	France	General insurance	
Organisation	Coul Cambridge Mo		Market IP	Belglum				Generali Group	Italy	General insurance	
AAA Club Partner		nc.	Marks & Spencer	UK	Company name	Country	Sec	Genertel (Generali Group)	Italy	Consumer insurance	
Achmea	Company name	Country	Marmalade Group	UK	CLAL Insurance	Israel	General i	Geotab	USA	Organisation	Country
ADAC	AIG	UK	Masternaut	Europe	Clarion	Japan	In-car audio	GirlMotor	UK	· ·	
Admiral France - L'O Assurances	Aioi Nissay Dowa Insurance	Worldwid	Matmut Assurances	France	CMA Claims	UK	Claims	GMAC Insurance	USA	Telekom Austria Group	Austria
Admiral Insuranc	Alcatel-Lucent	France	Mercedes Benz	Germany	CNIL (Commission Nationale de	France	Data protect		UK	Telenor Connexion Telit	UK Italy
Ageas Continental Eu	ALD Automotive	France	Meta System	Italy	l'information et des Libertés)			gocompare.com		Telogis	USA
Ageus Continental Et	Allianz	Europe	Michelin	France	Co-operative Insurance	UK	General i	Good Technology	USA	Teradata Aster	USA
AIG	Allianz Global Assistance	Europe	Mitsubishi Electric	Japan	Cobra Automotive Tech.	Italy	TSP	Google	USA	Texa	Italy
Aioi Nissay Dowa Insu	Alistate Insurance	USA	Mix Telematics	South Africa	Cognizant	USA	Enterprise reso	Greenroad Technologies	USA	The AA	UK
Airmax Group	Alo@Assurances		Mobile Devices	France	Compagnie Générale	France	Enginee	Groupama	UK	The Co-operative Insurance	UK
ALD Automotive	***************************************	France	Mobileye	Israel	d'Automatisme (CGA HBS)			Grupo Nacional Provincial	Mexico	The Floow	UK
Allianz	Alpine	Japan	Modus	USA	Comparethemarket.com	UK	Online com	Hannover re	Worldwide	The Hartford	USA
Allianz	Altea	Italy	MOJIO	USA	Confused.com	UK	Online com	Harman	USA	TomTom	Netherlands
Allianz	Altech Netstar	South Afric	Money Super Market	UK	Continental	France	Tier-1 s	Hastings Direct	UK	TomTom Business Solutions	UK
Allianz	Altima Assurances	France	Montezemolo & Partners	Italy	Corona Direct	Belgium	Bro	HDI Gerling	Global	Touring	Belgium
Allstate Insuranc	Amadeus Capital Partners	UK	Moody's	USA	Corporate Vehicle Observatory	France	Research	HERE (formerly Navteg)	Worldwide	Toyota	Belgium
Altima Assurance	Amaguiz (Groupama)	France	MORE TH>N	uĸ	Coyea Group	France	General i	High Point Auto Insurance		Toyota Insurance Management	Belgium
Amadeus Capital Par	American Family	USA		uk	Coverbox	UK	Consumer	Himex (Evogi Group)		T	LUZ
Amaguiz (Groupan	Amodo	Slovenia	Motaquote	Sweden	Coverhound	USA	General i	Hitachi	Japan	Toyota Insurance Management	UK
American Family	ANIA	Italy	Movelo McCriso Solutions	UK	Coyote	Europe	TI			Trac Global	UK
AnyDATA Corporat	ANWB	Netherland	MyDrive Solutions	-	Crédit Mutuel Arkea	France	Consumer	Hollard Insurance	South Africa	Hucker	South Africa
Aplicom Arval	AnyDATA Corporation	USA	Nationwide Insurance	USA	cTrack (Digicore)	South Africa	ΤŞ	Honda	Japan	Traqueur	France
	Aplicom	Finland	Nayteg / HERE	France	Cybit Masternaut	UK	TS	HopeRun Technology	USA	Trafficmaster	UK
Association of British II	Apple	USA	Dayya	France	Daimler Fleetboard	Germany	TS	HUK-Coburg	Germany	Transics Travelers Insurance	Belgium USA
Atos	ARM Holdings	UK	ND a Islandi Ehf	Island	Daimler Insurance Services	Germany	OE	Hyundai	South Kore	Trimble MRM	USA
ATrack Technolog	Arval	France	NIS Glonass	Russia	Danlaw	USA	T	IBM	USA	TRL	UK
Audiovox	ASFA	France	Nissan Europe	Europ	Data Teo Co Ltd	Japan	OC	ID Macif	France	Uniga	Austria
Autoline	Assercar	France	Nissan Motor Corporation	USA	Davis Instruments	USA	7	IDM Trucking	USA	Uralsib	Russia
Autosaint (Fresh! Insu Group)	Assicurazioni Navale	Italy	No Nonsense Insurance	N. Ireland	DBV Winterthur	Germany	General i	If Insurance	Sweden	US Department of Transport	USA
• • • • • •	Association of British Insurers	UK	Nokia	Finland		USA		iGate	UK	Vehcon	USA
` Union)	Assurland.com	France	Norton Rose	UK	Delphi		Tier-1 s	iGo4	UK	Verizon Telematics	USA
Axa Assistance	Atmel	USA	Novacom Europe	Netherlands	Denso	Germany	Tier-1 s	iKube	UK	Viasat	Italy
Axa Belgium	Atos	France	Novatel Wireless	Worldwide	Department of Transportation	USA	Goven	IMA	France	Vivium (P&V Group)	Belgium
Axa Global P&C	ATrack Technology	Taiwan	NTT DoCoMo	Japan	Detector	Spain	TE	iMetrik Global	USA	Vodafone	UK
Axa Matrix Risk Consu Axa Re		USA	NXP	Netherlands	Deutsche Telekom	Germany	M	IMS	Canada	Volvo Cars	Sweden
	Audatex		ÖAMTC	Austria	Diamonds	UK	Insuranc	Industrial Alliance	Canada	Wireless Car	Sweden
Axa UK Baseline telematic	Audi	Germany	OBD Experts	UK	Direct Line Germany	Germany		ICO (Information Commissioner's	3 116	Wunelli	UK
BGL Group Ltd	Audiovox	USA	Octo Telematics	Italy	Discovery Insure	South Africa	Consumer	Office)	° UK	Xirgo Technologies	USA
Bird & Bird	AutoDirect Insurance	UK	OECD	France	Disruptive Capital Partners	UK	Private e	Infrasure	UK	Young Marmalade	UK
BluO Fund	Autoline	UK			Diva	UK	Insurance		and	Zurich Zurich	Italy UK
	Autoliy	Europe	ADAS - MVCM		Dixon's	UK	Consumer electron	nine satail chain	ain	Zurich Financial Services	France
	Autosaint (Fresh! Insurance)	UK	Broker		Drive Power	USA	Data managem		K		1 141100
	Aviva (formerly Norwich Union)	UK	General insurance								



The main document is 810 pages of analysis, examples, case studies, forecasts and recommendations

				VAS opportunities using 0		Telematics is becoming the main stream	75
	Enticing hybrid opportunities	Designing a	privacy-enabled service	Digital roadside assi	stance	UBI will continue to adapt, morph and grow	755
	The changing role of smartpho			Remote diagnostics	and repair	Lessons learned from British challenges	758
	Less impact on the back office		business plan	Pay As You Use in t	Most Western E		760
	Economic and market drivers		fication Of Loss (FNOL) save	Eco-driving	Russia will eme	Insurers need to adapt (to survive)	/00
FUNDAMENTALS	Better risk management	It also saves money	OEMs - smar	Using the OBD dongle in	Central &	The 7 plagues of auto insurance	76
	Customer retention	Avoid litigation	02.10	OBD dongles are be	Russia's o	The 7 plugges of auto insulance	•
Introduction to in	Positive selection	Benefit from accident reci	Opportunities in	The OBD dongle in	North America	Tolomotics will when ice the cute incurred industry	76
What is insurance to	Customers' improvemen	Effective claims handling	UBI in the lea	Risks and limitations of 0	The US as	Telematics will uber-ise the auto insurance industry	/(
UBI or insurance tel	Telematics is also a drivi	The case for telematics in the	Key benefits (Potential safety risk	The rapid		_
		Why not all claims manag	Nay benenia (How to develop a lo	Asia is now wai	Smart home insurance on the horizon	76
Self-reporting b	Regulatory drivers	Data requirements from the	Building an effe	Consequences on t	No rapid o	A recent market with interesting savings potential	767
Telematics-bas	The European eCall man	Yet there are numerous a	_	Consequences on a	First positi	Smart home insurance is sold according to 2 models	768
SWOT analysis of the	The Viterbo judgement (i	Integrating telematics into	Today's proposition	Can smartphones de	New Zeals		
Why many insura	The Test-Achats gender		The Zurich Fi	Smartphones are vector	When Chir	From UBI to FBI: health & life insurance telematics	77
	The Mario Monti legislati	The necessary steps required	The programs	Smartphones' speci		FBI is provided with different styles	77
A maturing business	Following the path opens	Getting the right informati	Challenges encou		Thailand's	"Soft" end of the scale	77
Increasing chum	Proposed changes to the	Partners and the changing	Key value proposit	Smartphones bring	Malaysia is	Cross selling different lines	772
Changing claims co	December 1191 has not	Choosing the technical so	The components of	Overview of mobile UBI	India will a		772
Repair costs	Reasons why UBI has not	Finding potential new clair	Fleet UBI evolution	a. The growth of sm	UBI has already	FBI is most stringent in life insurance	
Personal injury	Challenges for insurers	The new claims work		The diversity of bus	In Latin America	The corporate line	77.
Fraud	Privacy issues	VI.	BUILDING THE T	Making the smartphone	Insurance telen	FBI delivery uses a similar value chain as UBI	77
Filing regulations in	Regulatory barriers	DISRUPTING THE INSURA		Addressing the key	The changing fi	What could Google do?	-
The advent of online	Intellectual property i	DISKUTTING THE INSURA	Defining your te	Ensure the validity of	From trial	What could Google do?	7
Sustainability of the	Hurdles in implementatio	The former of telescotter	Selecting the tech	How future technolo	Personal li	Google's steps in the insurance sector	77
cara and a mo	Lack of a clear business	The insurance telematics		How to launch a success	From PAY	Google could acquire an OBD specialist	77
The impact of the	Difficulties convincing inc	The global telematics battlefiel	Selecting the	Design your overall	A future fo	Google could become the most advanced insurance aggregator	77
The technologies the	A long deployment time	How big is the opportunity	The sunset of	Choose a model tha			
Big car data an	Challenges for consumers	Which players are interes	Defining a purchase	Implement the right	Market for	Answering the key trends and questions	7
Broadband con		The future changes in the value	Why a telema	Avoid operational hi		How will UBI evolve in the next 5 years?	77
	Lack of sufficient and uni	Movements in the telematics in	How to appro	Smartphones have beco	Current market	What will be the impact of apps in UBI in 5 years?	78
Connected nav	Privacy concerns	A rapid industry transform	Choosing the	On an priories have beco	Expected growt		
Smartphonisati	Potential conflict of inten	TSP survival strategies	The key selection	The business case for	Our metho	How will the evolution of analytics affect underwriters & actuaries?	78
Active & passiv	What this means for the future	Impact on the supply to th	The future integrat	The growing penetration	Global pre	How and when will ADAS affect the insurance sector?	78
Autonomo		Impact on the demand for	The end of st		Which may	How is telematics data being used in claims today and will this change?	78
The impact of	HOW TO CREATE A SU		The implication	New cars are increa	Which cha	What will be the impact of eCall in Europe and when will it have an impact outside Europe?	78
Contabourties of		How will the role of autom		OnStar showed the	Value added se	What are the current mobile UBI initiatives & business models?	78
Can telematics so	Learning from recent hist	The impact of autonomou	Selecting your to	All OEMs have emb		What are the main channels to market for OBD-data related services?	78
A European perspec	What the pioneers can teach	_	The landscape of r	The drivers behind OEM	Market foreca	How will the device mix evolve?	78
The North American	2004-2008: Norwich Unit	Understanding Advanced Drivi	Our evaluation of s	Managing costs	A relatively limit	How should insurers expect their relationship with OEMs to evolve?	78
So who is UBI for?	2008-2012: MAIF / MAC	The 4 human cognitive pr	The major pla	Selling UBI as a VA	A slower expan	Is UBI making cars more prone to hacking?	78
The young man	2007-2015: UNIQA	The 4 steps of the evolution	The major pro	Keeping control of p	Global gro		_
The middle ma		The 6 major systems grou	Solving the key	The 4 OEM-based distrit	North Ame	Recommendations to insurers	7
The senior drive	2004-2016: How Progres	Today's OEM involvemen	How important is t	The captive model	Europe	Finding the right value proposition for consumers	78
Some of the challen	State Farm, the afternar	The Google Car		The exclusive mode	Cortyo	Multiple deployment strategies	79
Some or one or annual	Liberty Mutual also innov	Calculating the impact of ADA!	What is the winnin	Non-exclusive agree	Revenues for	Business model	79
THE NEW DRIVER	Ingenie and the young di	The potential to reduce of	What are the new	The TSP hub model	Worldwide		79
THE NEW DRIVER	Lessons from Italy's telematic	The evolution of cruins as	What are the spec	How to face the operation		Why is now a good time to start usage-based insurance?	7.0
Anaburianshauta	UnipolSal's model	Overcoming the ma The factors influencing ti		Interoperability is no	North America	Personmendations to governments and regulators	8
Analysing the dri	Reasons for the Italian to	The factors influencing to	QUANTIFYING T	Alternarket strategi	Europe	Recommendations to governments and regulators	0
The benefits of teler	Synthesis of the lessons from	The sectors amounting to		Time to market	Revenues for	December delicate telemeter & cook december des	
Technological driver	V •	THE 5 KEY UBI MODELS	The business		ite relides lot	Recommendations to telematics & analytics providers	8
More affordable	Reinventing the concer	THE 3 KET OBI MODELS	The typical busine	Privacy issues	Revenues for		
Richer OBD do	Building a comprehensive out	Once the Man from the Assessment		Big car data	revenues for	Recommendation to automotive OEMs and suppliers	8
The next evolut	The rationale for value a	Opportunities from worki	Gross premiu	How will tethered solution	Revenues for		
	How to choose the best	The challenges of telematic de	Claims costs	Tethered solutions a	revenues for	Recommendations to mobile operators	8
	Gamification and third pu	Early experience and lear	Operating exp	MirrorLink	A alimosa inter-	the future: 2030 trends /42	
	Becoming an ISP (Insurance)	The challenges most com	Profitability	Google's Open Auto			
	Creating a positive customer	Introduction to OBD technolog	Making a success	CarPlay is a lot more		DAS and autonomous functions 743	
		Available data from the OBD p	Italy 640	Comparison of the 3		risurance premiums 747	
	Follow best practices on	Sensor live value	France		By 2030, UBI will	have become the new norm of insurance 750	
	Create an original and bu	Generated DTCs	Germany				
		Requests used by the OB	The USA	VIII.	CONCLUSIONS	AND RECOMMENDATIONS 754	
		Collecting data from the C	Russia				
		Commenty data inclinate C					
				ce off in each region?		652	



6 ways telematics will disrupt insurance analysed

1- BIG DatAnalytics: the future scores and actuarial models

- How to leverage telematics with analytics.
- Which data to collect and what factors to rate.
- How to use contextual information
- 10 analytics company profiles.

2- The impact of autonomous safety functions on the motor insurance industry

- Present and forthcoming autonomous functions affecting insurance
- Speed of the technical evolution and emergence prediction
- Analysis and forecast of the effect on UBI

3- The benefits and (lost) opportunities of telematics in accident and claims management

- Internal and external forces affecting the claims management sector examined
- Case studies of successful implementations and best in class usage of data in claims
- Recommendations to entice the claims departments

4- The advent of mobile-based UBI becoming the default proposition

- Detailed assessment of the current mobile UBI initiatives worldwide Key solution providers analysis
- Range of business models assessed and compared
- Technical capabilities and the remaining constraints studied

5- The present and future usage of the OBD dongle and its data

- Overview of the OBD technology and its capabilities
- VAS and service augmentation opportunities explored
- Analysis of OBD data's main channels to market
- Assessment of the key independent connected car service providers.

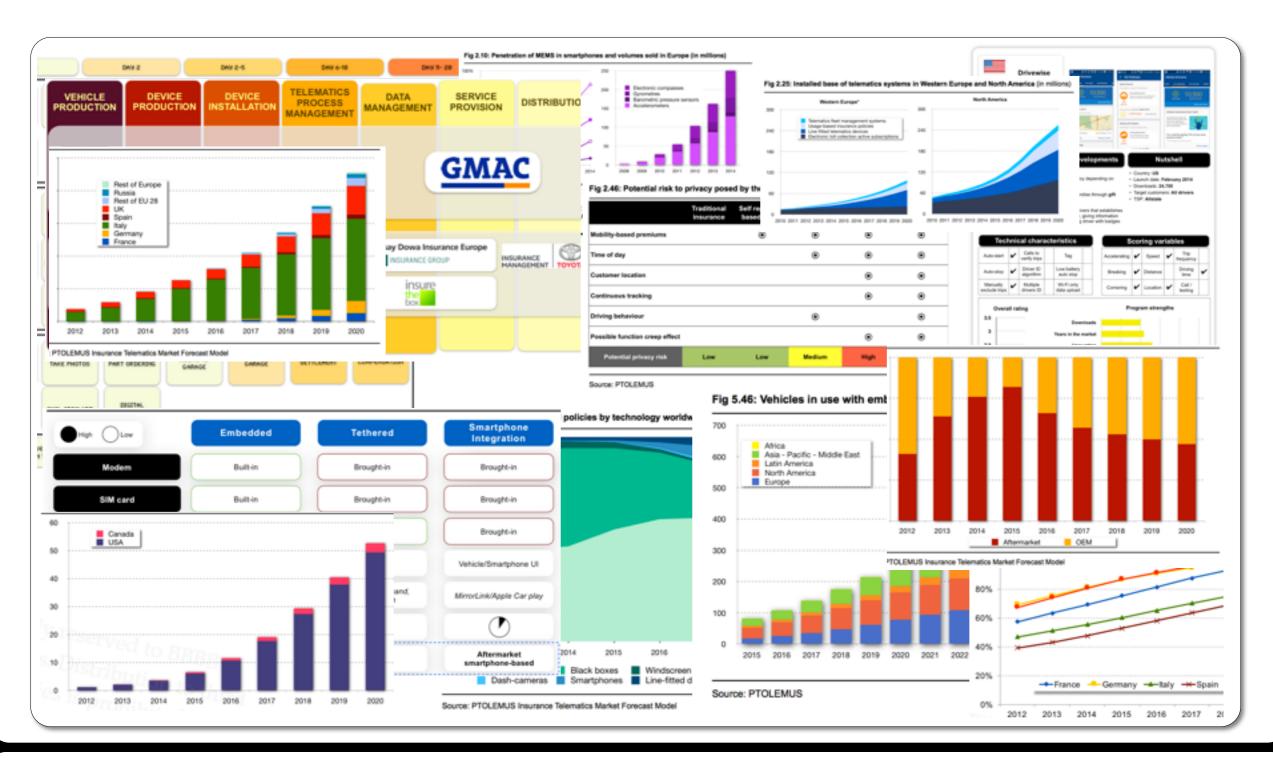
6- The rapidly changing role of car manufacturers in the UBI market

Analysis of the current OEMs position on telematics services and UBI.

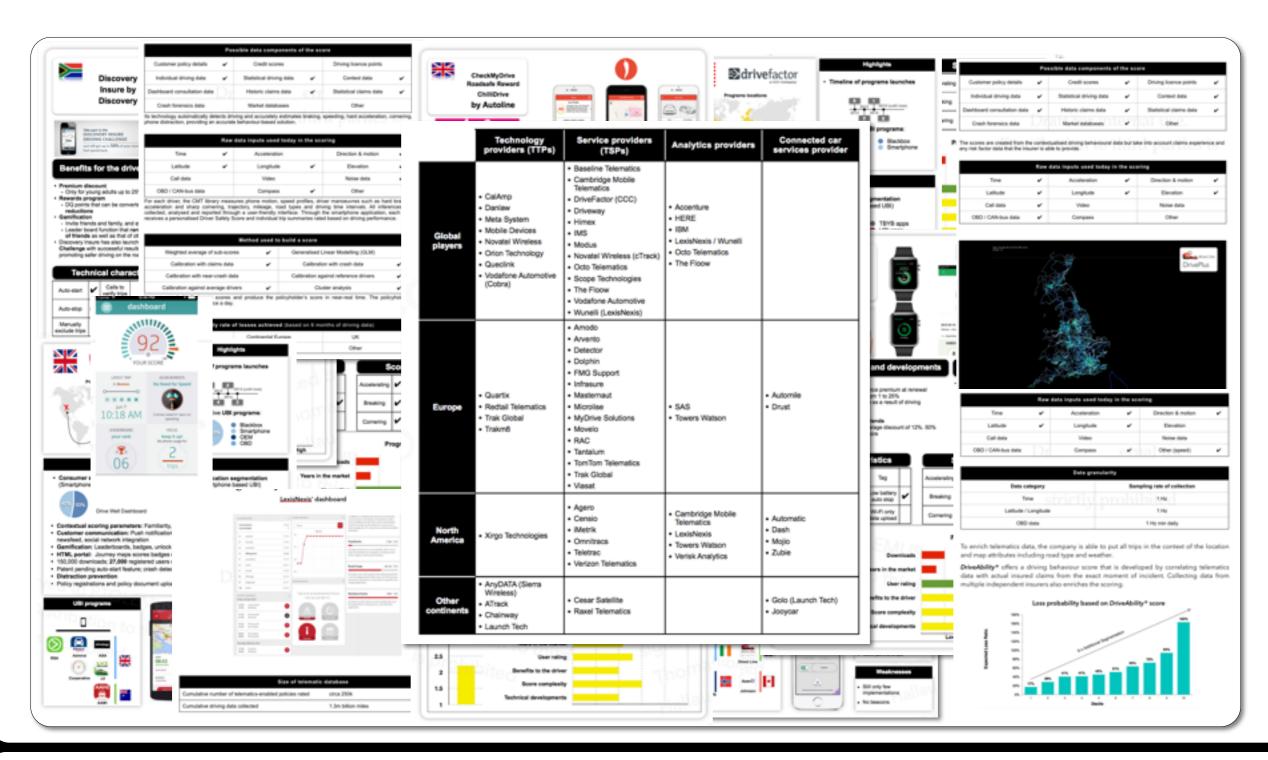
Assessment of the opportunities for insurers to use OEM data Likely models for insurance - OEM partnerships. OEM data distribution strategy recommendation



Illustrated by 422 graphs validating each statement



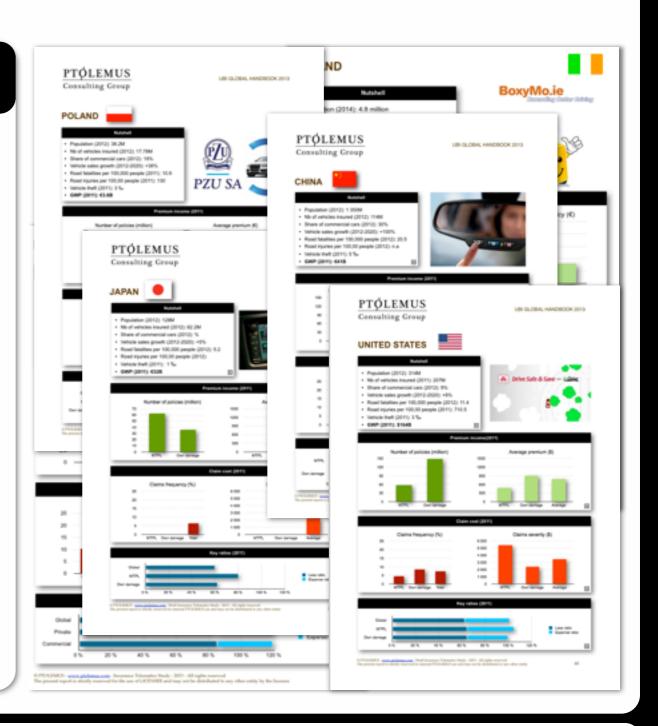
Complemented by 78 company and solution profiles



A worldwide comparison of key geographical markets

28 countries analysed in depth

- Critical rating data includes
 - Gross written **premiums**
 - Number of **policies**
 - Cost of claims
 - Loss and expense ratios
- Influential economic parameters and UBI activity analysed
- Environment factors presented such as:
 - Claims frequency and severity
 - Vehicle density,
 - **Theft** rate or
 - Cultural factors
- Readiness index for each national market



The first insurance market forecast to estimate the impact of autonomous safety functions

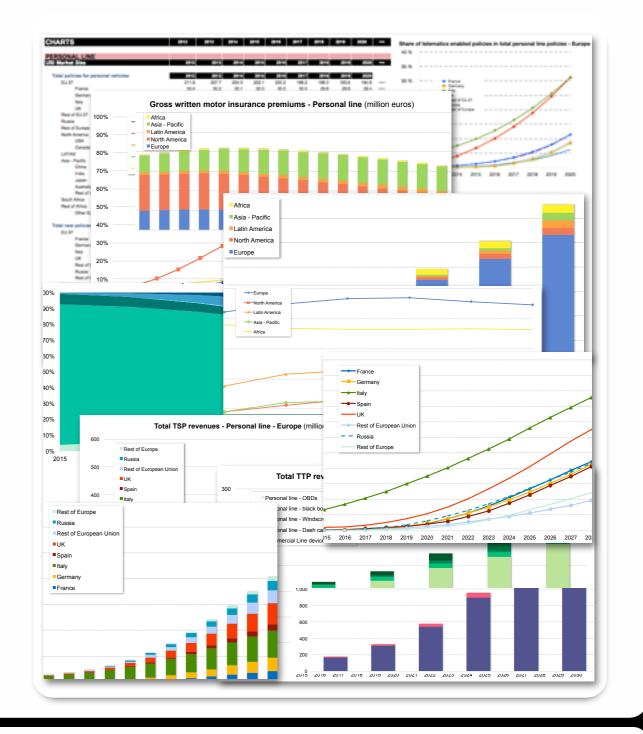
Market forecasts to 2020 and 2030

- Over 2400 line Excel sheet based on our 6000-line bottom up model using more than 2500 lines of inputs.
- Updated until January 2016 with the latest available market figures compiled from interviews and secondary research

Split by geography, technology and business models

- 16 areas including USA, Canada, France, Germany, Italy, UK, Japan, China, India, Brazil, South Africa, Russia, LATAM, etc.
- 7 technologies (line-fitted OBUs, professionally installed and self installed black boxes, light OBD dongles, connected OBD dongles, windscreen devices & CLAs, smartphones)
- Differentiated by channels and segments: aftermarket / OEM, personal / commercial, channels...
- The impact of ADAS & autonomous cars on premiums

Market size (volumes & revenues) for insurers, TSPs, TTPs, OEMs and MNOs



The legal landscape explained by legal experts

- Identify the regulatory drivers that will influence your UBI strategy, including:
 - The **requirement on insurers** regarding data management and protection
 - The eCall, ERA Glonass and EOBR mandates
 - The **Viberto** Judgement
- The European Data Protection Directive progress
- The **privacy regulations** and industry best practices
- The patents in place and current Intellectual property litigation proceedings



The UBI Study is a searchable PDF document that can be used by the whole company, worldwide



Reports	Full Study	Full Study with 2020 & 2030 market forecasts			
Contents	 900+-page study (PDF format, password- protected) 50 TSP and TTP company profiles 30 country profiles 	 900+-page study (PDF format, password-protected) Market forecasts outputs with graphs (Excel format, password-protected) 50 TSP and TTP company profiles 30 country profiles 			
Company-wide licence	€ 6,995 Approx. \$6,595	€ 7,995 Approx. \$7,495			

For more information and to order the study, contact us at thomas@ptolemus.com



We also issue a quarterly dashboard of the UBI market



All the hard data you need to define & adjust your strategy

- 60-page barometer of the global UBI industry
 - Covers 170 companies
 - Covers the US, Canada, France, Germany, Italy, Spain and the UK
 - Issued on a quarterly basis
 - 190 charts, tables & figures
- Leverages both public information and primary research
 - A large set of public information collected from conferences, desk research, etc.
 - Supplemented and validated by primary research & data (Interviews, supplier questionnaires, own market forecasts, etc.)
- Brings most important market news

- Estimates UBI volumes and sales for all main players
 - Insurance companies
 - TSPs
 - Technology providers
- Deciphers the key market trends
 - UBI penetration
 - Number of programmes
 - Mix by business model (PAYD, PHYD, TBYB, etc.)
 - Market share of all main insurers, TSPs and device makers
 - Technology mix (Black boxes, OBD, apps, etc.)
 - Business line mix
 - Segment mix (Young drivers, mature drivers, etc.)
 - Channel mix aftermarket / OEM



PTOLEMUS Consulting Group Strategies for Mobile Companies

Brussels - Chicago - Paris - London -Hannover - Milan - Boston

www.ptolemus.com



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Clients across the mobility ecosystem...

