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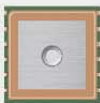


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Insurance telematics- It's not about whether, it's more about when

Telematics is redefining vehicle insurance in many parts of the world with Italy, UK and United States leading the show (Insight Report). Currently the global insurance telematics has an estimated size of US\$ 4 Billion with over 4.5 Million subscribers. It is expected that the UK market alone will be US \$6.5 Billion by 2020 (Accenture, UK Insurance Practice). Geographies where telematics ecosystem has evolved along with those where it has been made mandatory will see faster growth of insurance telematics.

Telematics is assisting insurance companies get comprehensive picture of an incident leading to claim. It is enabling them with data to settle the insurance claim. Be it 'First Notification of Loss', driving habit, precise time and location of the incident etc. Such data, which is important in claim settlement, will be made available quickly, and to a large extent they will be authentic. Telematics insurance gives an opportunity to the customer to drive well and pay less. For large commercial fleet operators, this could be tool to cut the cost of insurance and further lower the cost of maintenance which can be accrued 'by default' through good driving habit.

Over the last decade we have seen the emergence of 'aggregator'. These aggregators are providing an online interface portal working out the best deal for the customer. Hence, it is becoming increasingly important for insurance companies to look at the emerging value propositions for the customers and align their services accordingly. According to Accenture Claim Insurance Survey 2014, about 86% of the customer filing for claim was satisfied with the service. But, when asked how likely they are to switch their insurance service provider over 50% responded as planning to switch to another service provider. In US "Switching Economy" puts up to \$1.3 Trillion of revenue up for grabs for companies offering superior customer experiences (Accenture, 2013). Telematics insurance could prove to be a disruptive technology, providing an opportunity for a player outside the insurance industry to get a foothold in this industry using technology advantage.

Personal driving habit like vehicle acceleration, night time driving, hard braking etc are influencing the vehicle insurance premium. With Internet of Things and connected car becoming a reality as a part of the larger connected world, some radically new approach to insurance which can have vehicle insurance premium converge with the personal premium cannot be ruled out.

It's over a decade since the telematics insurance (UBI) emerged in US, when insurance companies like GMAC, Progressive, Allstate etc began offering discounts linked to kilometres driven. Today, it is entering into the growth phase in US where it is expected that 20% of all vehicle insurance will have some kind of vehicle telematics based insurance. In geographies across the world it's not the question of whether it will be, it's more about when it will be.



Maneesh Prasad

Maneesh.

Telematics for Commercial Lines

The First Notification of Loss (FNOL)



The purpose of this article is to highlight the relevance of Telematics to commercial lines Insurers as opposed to personal lines. In short the value proposition is different and needs to cater for the needs of the Insurer as well as the Fleet. Whilst the way in which Telematics data is captured and managed uses largely the same hardware and software; the focus for an insurer is more about First Notification of Loss (FNOL) and claims management as well as driver behavior. Currently personal lines is more about marketing, selection and retention of good drivers within a given "policy pool".

One of the fundamental differences with commercial lines insurance is that the premium is fixed at one level for the vehicle that is being driven i.e. HGV, Van, Car, Motorbike and the

insurers have a risk profile against the vehicle and the type of use it is being put to, 24/7 deliveries, taxi, heavy goods being the typically higher premiums. The other fundamental difference with premiums is that they are based on claims history so this is why commercial lines insurers are interested in managing the claims processes and those fleets that are 3rd party rather than fully comprehensive are starting to engage in FNOL and Claims Management initiatives.

The fleet telematics market is already well established, and so when a commercial lines insurer is looking at a telematics proposition with a fleet then both parties need to understand what their respective objectives are for the telematics solution. We have developed a simple 3 level model of telematics to help both fleets and insurers align their objectives. Whilst the hardware devices might be capable of meeting both

objectives the way in which the data is collected and set up may not be, so it is important to understand the differences:

Many fleets start using Telematics for track and trace which is particularly useful for delivery companies where you can provide estimated time of arrival (ETA) for customers. But significantly the data sets are at this level are not good enough for accident management and driver behavior. It is likely that a commercial lines insurer will look to replace this sort of Telematics device if it cannot be changed, some devices are being set up to collect more "event based" data to create driver behavior scores. The optimum approach to data is "granular" data which enables both Driver Behavior and Accident Management. The good news is that a higher rate of granular data collection can still be used for Level I - Track and Trace.



Table:

Telematics Level	What	Data Collection	Relevance
Level I	Track & Trace "Where are They"	GPS - Every 60 - 120 sec	Fleet – Operations Insurer - Nil
Level II	Fleet Management Vehicle Operations Safety Checklists,	On Demand	Fleet – Fleet & Operations Insurer - Nil
Level III	Accident Management & Driver Behavior	GPS/Accelerometer and Gyroscope every 1 sec by 1 sec	Fleet – Risk Mgt Insurer – Risk Mgt

Once Telematics moves to Level II then it will be embedded into the vehicle fleet management and operational business processes, so that the fleet gets the maximum from the investment that they have made in telematics. For larger vehicles they may have installed a solution that collects CANBus data to manage more vehicle and engine parameters. The right telematics solution should be deployed to meet business and operational objectives at Level II.

Level III is the hardest level for fleets to engage with and it is very important that objectives are aligned before technology is installed for fleets and their employees as well as insurers. Insurers are all about Risk Management and in our experience those fleets that are committed to risk management and have safety as part of their culture are likely to be more successful. Working with commercial insurers we know that "driver behavior" change is a big challenge unless there is something in it for the fleets and their employees, an easier way to introduce the change is by focusing first on FNOL and Claims Management. Driver Behavior needs to be supported by internal business processes that provide both feedback and corrective action (training) for those drivers that are shown to be a high risk relative to the rest of the fleet (policy pool).

There is a small but growing trend whereby Insurers will mandate the installation of a Telematics solution before they underwrite a fleet and this will be based on both the risk profile as well as claims history. Commercial

insurers understand that different risk profiles need different telematics solutions as well as recognizing that solutions need to cover the whole fleet.

It is highly unlikely that a premium will reduce based on the installation for a telematics solution, but some commercial lines insurers are seeing it as the best way to manage a "high risk" segment in a fleet and are seeing improvements of 20% in their loss ratio for a fleet installed with telematics. Commercial lines insurers are seeing the value of telematics data and can easily identify high risk drivers which could lead to insurance being removed or probably more likely a variable premium. They are also using this data to ensure that Driver Training is focused for the drivers who will benefit most from the training, as oppose to the traditional "sheep dip" approach.

There is also an opportunity for commercial insurers to take a "snap shot" view of the fleet risk prior to underwriting the premium using the "rate my drive" concept; the same is being applied for new hires and grey fleet drivers.

The Commercial Lines Market

One of the challenges for Insurers and Underwriters in the Commercial lines market is the role of "brokers" and "agents" who act as a sales channel for commercial lines insurance. Sometimes the objectives are not aligned as the broker is selling the policy, getting the best price for their client whilst the insurer is underwriting the risk. When a broker




Simon Ralphs

CEO

Telematicus

Simon has been delivering innovative risk management, environmental and efficiency impact solutions to organizations around the world including Smartphone as a Sensor Solutions for Insurance Clients.



works with a client over a period of time to deliver a change then the results are tangible, telematics provides real data for all parties to work with. Some Insurers want to get direct to the client, in partnership with the broker, to ensure that they understand the risk and get commitment for the telematics solution they are recommending.

A number of telematics companies have forged links with brokers to link premium reduction to a drop in accidents and their related costs, although typically the main driver in the business case has been a reduction in by fuel costs. Companies have looked to develop onboard user interfaces that “coached” the driver while in the vehicle and this has become of interest to fleets to help manage the driver education process. Research has suggested that “haptic” (sound) feedback is more effective than visual feedback i.e. Red, Amber, Green unless there is clear coaching around what triggers a change. Point solutions that are just focused on one factor e.g. Fuel (MPG) have been effective but have limitations as they are generally not integrated to overall business systems.

As one of the main drivers for the commercial lines premium is the accident history, the accident and FNOL process is of significant interest to the commercial lines insurers. As alluded to earlier there are opportunities for telematics solutions to help improve the accident and claims process as well as the opportunity for collecting driver behavior data prior to the incident.

The UK market has over 4M commercial vehicles, whilst this market is circa 20% of the personal lines market there is still a huge opportunity for commercial lines insurers to introduce a range of relevant telematics solutions for the fleets. This market is probably going to see the full range of the telematics

solutions from Smartphones to Hybrids, to Plug Ins and Fixed devices including Video.

The US market has over 18M commercial vehicles in fleets, with about 21% overall equipped with some form of telematics equipment. Among the largest fleets telematics penetration is the highest at about 46%.

According to industry analysts Berg Insight, approximately 2.5 million commercial vehicles already have telematics deployed. They forecast that the installed base of fleet management systems will reach 5.7 million in Europe by 2016, and the rate that TSPs are growing in the market (with adoption rates at 30-40% in some regional applications i.e. the UK’s light commercial vehicles(LCVs) market) seems achievable.

Nevertheless, that is not the story across Europe, where overall telematics penetration in the 29 million LCVs in operation throughout Europe stands at just 6.2 per cent, according to Frost & Sullivan (Frost & Sullivan, 2013). But this is higher than telematics penetration in personal lines vehicles which is around 2%


The market potential for commercial insurance telematics is much less than personal-line UBI. There are a number of reasons for this. Firstly, the reduced number of commercial vehicles, which is roughly 20% of private vehicles both in the US and the UK. But with approx. 4 million vehicles and 792,000 claims made in 2011, resulting in payments to customers of £2.2 billion (ABI, UK Insurance, Key Facts 2012) - this statistic is higher than their personal lines claims rate at 12.6% this identifies that insurance telematics could have a huge part to play in commercial applications if solution can influence both claims management and also potentially driver behavior.

Secondly and probably most significantly then apart from a few organizations who place safety at the core of every action, it is much more difficult to manage and influence change. The old adage that culture always beats strategy is key, it takes time, money and commitment to install a whole company cultural approach to risk management and safety, a simple strategy statement will not cut it. For fleets the ability to reduce insurance costs and claims frequency is mostly an afterthought and almost all telematics business cases are predicated on operational efficiencies and savings.

Summary

As explained, telematics for commercial fleets is already well established and lots of fleets already have telematics in place, but in many cases the objectives and hence relevance for fleets and insurers is not aligned. Alignment comes from a risk management strategy that is embedded within the organization culture of fleets.

For fleets that already have telematics installed you need to be clear about whether your existing solution will meet the requirements of a commercial lines insurer. For those fleets without telematics you need to ensure that if you are going to install telematics it provides all the functionality that you and your insurer require – it maybe that your insurer will contribute towards the cost of the solution.

For Insurers you need to understand the where the fleet is in terms of its maturity towards risk management and a safety culture, are they ready for telematics solution to be installed and what support are they likely to require to make it effective. This might even lead to you providing additional and relevant services, license checking, fleet management, corrective action training, safety and risk management documentation. 

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IMPARTING DRIVER BEHAVIOR EDUCATION THROUGH TELEMATICS

It happened just over 3 years ago. A light-bulb moment and certainly an industry game changer for me. It was something that had an unprecedented effect on my thought processes and how I was able to bring my expertise and experience to ensure an improvement in driver and driving safety for insurance companies, TSP's and fleet operators.



And rolled into these significant industry groups, was a sector that desperately needs new safety goals, standards and principles – young drivers.

This ground breaking flash of inspiration could become a future game changer ... a life saver by default. The impact this could have on every driver deploying telematics could be seismic ... but only if it

has a magic ingredient sitting alongside the telematics devices. Call it a revolution in driver safety that happened by accident (excuse the pun).

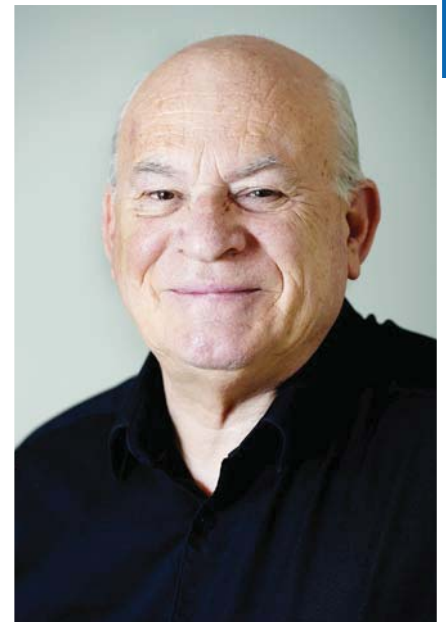
In my 38 year career in the safer driving industry, this potential colossal impact had never been possible before, but here it was, looking at me in the face and saying to me ... just do it Paul! Make it happen and push this life saving ideal to all global markets. That was 3 years ago and here I am now – doing just that, turning this wonderful concept into reality and taking it to the insurance, TSP, fleet management and OEM markets globally.

So what is this wonderful product and how could it mean lower loss ratio for insurers, lower crash frequency and severity whilst having a positive effect on lowering global road deaths?

It is something that will bring a BIG change in the insurance and fleet operator sectors. It is something that is set to transform the way insurance companies set new parameters on the driver risk they cover and something that will grow exponentially over the next few years. Plus for fleets, it covers some compliance and litigation issues by providing driver audit trails, duty of care, corporate homicide and corporate social responsibility. And its impact on society could eventually be huge.

Yes its Vehicle Telematics, but it's not just another technology – it's a significant value-added capability on top of this. There are lots more to come from these life-saving pieces of technology. So for the moment let's forget some of the great things that Telematics offer insurers, so we are able to concentrate on and life-saving technology they bring to market.

A fact often forgotten is that Telematics assess and evaluate driver behavior, safety and driving style



Paul Ripley

CEO

Driver Risk Dynamics

In a stellar award winning career spanning over 3 decades, Paul has become a respected world authority on safer driving and his services are trusted by an array of the world's top companies and prominent car manufacturers. His huge contribution to driver safety was recognized by HRH Prince Michael of Kent who awarded him the coveted 'Prince Michael Road Safety Award'. He has the distinction of being called 'God's Chauffeur' by the UK's Daily Telegraph.

The missing piece in the telematics value chain is driver education and coaching. It's essential that the education comes in the form, as our does, of a perpetual drip feed of engagement through refined 'evidence based' content which prioritizes coaching principles and mentoring processes.

perfectly. No need for the traditional online driver risk assessment which, quite frankly, never got my vote. To people like myself, this is truly magical as the assessment is unbiased and without interference. The data capture and quality analytics tell us what we need to know about driving behavior. That's this new product's secure starting point.

When data is captured and analyzed from telematics devices there is often another (almost) secondary purpose to its usefulness... the infamous drivers score. This is where part of the problem lay and it's also where the Telematics value chain stops.

Whilst a driver's score can be useful as it rates driver behavior and capability but what use is the driver score when no education or coaching follows it? Because of this crucial factor and the well-known 'Hawthorn effect' of telematics deployment can last a little as a couple of weeks, it becomes a dead-end.

Question; if the driver knew they were being monitored and measured before they received a score – surely they would have been on their best behavior during that assessment period, so how can they further improve using this equation? Could that be game over, when it really should be just starting?

The missing piece in the telematics value chain is driver education and coaching to ensure the Hawthorn

effect of deploying telematics is extended exponentially. It's essential that the education comes in the form, as our does, of a perpetual drip feed of engagement through refined 'evidence based' content which prioritizes coaching principles and mentoring processes. Using this formula is the only way experienced drivers will 'buy-into' the process of furthering their own safety and fuel saving improvement through education.

Plus this is where the real deal of 'unsafe driving behavior' can be exercised. Safer driving for experienced drivers is not a skill-set ... it's a mind-set. It's all about the critical human factors of attitudinal and behavioral elements that's the real cause of unsafe driving

Skill doesn't affect how we think and feel or how we act and react to situations. It has zero effect on emotions, mood swings and temper loss when confrontation and competition for road space follows – these have nothing to with skill. The mind is the BOSS as it controls almost everything a driver does; it's called emotional instability and lack of mental discipline. The mind runs the show and almost forces drivers to do things they sometimes don't want to, even though they know they're potentially dangerous.

The DRD product embraces these hugely important safety related factors as I know the potent forces in a driver's make-up and personality

have nothing to do with skill or knowledge or even experience. The mental side of driving is the key to safety and our products revolve around these critical factors. Having studied driver and driving psychology and philosophy for some 30 years, this is the real danger that all drivers are faced with.


It is absolutely essential that the main focus on any education is engrained with elements that focus on the mental aspects of safer driving as everything before this, has always been skill based. Coupled with these essential human factors it's also vitally important that every snippet of wisdom providers comes from the 'carrot' and never the 'stick'. Incentivize, inspire and empower ... through engaging targeted coaching and world class education.

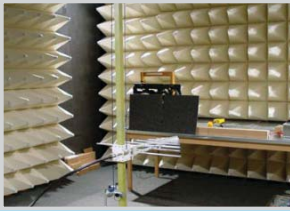
Driver Risk Dynamics, the global leader in Telematics Driver Behavior Education have just launched their ground breaking product to market which provides the missing link in the telematics value chain.

This evolutionary driver coaching product is totally 'evidence based' on the drivers specific driving behavior. The world class content which is written by a global safer driving authority; fits all drivers, driving any vehicle type, in any country and language.

For insurers we expect the product will lower loss ratio and crash causation, frequency and severity. The product enhances drivers' skill sets, improves knowledge acquisition and facilitates behavioral change. For TSP's and insurers it presents a differentiator in a market suffocated by parallel offerings.

And importantly for insurers, DRD provides frequent customer 'touch points' in a caring and friendly manner to grow relationships and help brand values, retention and loyalty.

The next generation in the telematics delivery value chain is here. 



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INSURANCE TELEMATICS AND THE 'WILLINGNESS' FACTOR



The motor insurance industry is on the brink of an intense change that will effectively manage claim costs, enhance pricing style, improve profitability, and differentiate policyholder products and services. Additionally there is an opportunity to improve the driving style and reduce accident frequency and severity. But the success of such technology lies beneath the fact as how collaboratively the ecosystem works. In an exclusive discussion with Telematics Wire, **Jonathan Hewett**, Global Chief Marketing Officer of **Octo Telematics** talks about the fast-growing insurance telematics market and factors dictating the willingness of ecosystem players.

What are your views on the current global status of insurance telematics?

Globally the market is starting to grow as the international players start the process of testing and learning across the broad insurance telematics enterprise. What is clear to us is that there is general acceptance that insurance telematics can improve pricing decisions and reduce claims costs but insurers are starting to be more demanding of the data as their curiosity increases.

There are also some very interesting plays from pure play telematics insurers who are doing some very innovative things around loyalty, digital and are really using the data

without the challenge of legacy system integration

Octo maintains one of the largest database of individual's driving behavior in the world. Would you like to share some of the findings of this data? Have there been any regional differences?

The data provides very useful insights not just at country level but also across different risk and consumer segments. In many ways telematics is best thought of at a customer segment level allowing for greater accuracy and individual price and claims decisions. Insurers can also use this dynamic data to build better models for retention and cross sell

right across their Personal lines businesses

What has been the response of government authorities and NFPOs towards such technology? Can we expect some legislations or mandates specifically in the auto insurance sector?

I think government departments would prefer the market to operate as a market! However, there is great interest in combatting fraudulent claims such as whiplash in the UK. In addition anything that can bring down the cost of insurance for the consumer is welcomed and gains general support

When it comes to driving data, people often raise questions on the data privacy & security. Do you think such issues will hamper the growth of insurance telematics?

I think it's a factor but only if the dialogue with the end consumer is not transparent. When insurers are clear in their communications as to how they will collect the data and what they will use it for and in turn, ask the consumer to accept the terms of the policy, there is a fair and transparent understanding between customer and provider. Put simply, consumers accept providing data for a cheaper price and better service in the event of a theft or accident

Octo has maintained a good relationship with car OEMs. What have been their expectations in this regard?

The key issue for OEMs is what to do with all of the data they have or possess the potential to collect. A lot of cost has gone into 'Connected Car' programs without first establishing what consumers really want and crucially, what they are prepared to pay for services. In almost all geographies it's the law to have car insurance so it makes sense for OEMs to develop these offers with a TSP who is ingrained in the insurance business and can provide the connectivity and know how. Done well, this can also help grow brand loyalty in addition to revenue within the connected car paradigm

Is there a market need for telematics data linked with GIS' to create risk maps or identify accidents dark spots?

In many ways, this is already being done in some countries and priced in but it would be a very useful service for end consumers and potentially allow rating by journey or the suggestion of an alternative route through intelligent routing

While many telematics service providers across the globe are venturing into insurance sector, how do you see this industry shaping up in future?

Insurers are notoriously slow to change and I think the right TSP can be the innovation partner for their insurance client. Technology is not the constraint but we need to find better ways to integrate telematics services into legacy systems and the players with the most experience are best placed to do this

With the most enthusiastic first, could you arrange these stakeholders in order of their willingness to adopt insurance telematics :-

Insurance Carriers, Telematics Service Providers, Automotive OEMs, Car Rental and Fleet owners, Individual drivers

1. Telematics Service Providers
2. Insurance Carriers
3. Car Rental and Fleet owners
4. Individual drivers
5. Automotive OEMs

I think there is willingness for all stakeholders but all actors now want to see the value in terms of value proposition, improved combined ratio, better vehicle relationship management or improved connected car programs which takes us from the phase of a good idea looking for a market to massification.



Jonathan Hewett

Group Chief Marketing Officer
Octo Telematics

At Octo, Jonathan has a reputation of delivering customer focused step change strategies across the public and private sectors. He has wide expertise in shaping strategy and stretching brand potential into new and emerging markets by developing and building transformational sales, marketing and operational capabilities. He is networked across the Retail Financial Services and Insurance industry, with experience of developing partnerships and managing joint ventures to Board level.

INSURER TO INSURED (I2I)

THE KEY TO UBI SUCCESS



Usage-based insurance, and more generally Insurance Telematics, have been shouldered with tremendous expectations. Most of those expectations have thus far fallen short of the hyped promises to disrupt private passenger auto insurance, bring lower rates and personalized pricing to many drivers, and encourage safer driving behaviors. Never has a technology missed so many supposed “tipping points.”

At its basic, UBI is a segmentation

and pricing strategy. UBI allows for additional data variables to be considered as part of the underwriting and pricing process. Intuitively, how, when and where a car is driven should matter. And they do. They matter more than credit and all other pricing variables in place today. They have interactions with age, marital status, and vehicle type, and likely negate violations, territory, and gender. The problem with using driving data for underwriting and pricing is that (1) driving data is not readily available and is hard to collect, (2) it takes a lot of data to know how to use it, and (3) the

objectives of all the players flooding into the telematics ecosystem aren't aligned.

Unlike all other rating variables in practice today, predictive driving data can't be collected from the consumer via the application process, can't be ordered from the Department of Motor Vehicles, and isn't likely to be shared between insurers. Instead insurers are left to pursue their own costly individual data collection projects.

They do this through pilots with employees and volunteer customers



by distributing black boxes, OBD dongles, and smartphone apps. Unfortunately, insurers' data collections goals are often derailed by the problems TSPs have managing the logistical, compatibility, web, and communication components of pilots. Pilots inherently lack scale and expensive per vehicle costs often upset CBA assumptions.

Pilots, by design, are short in duration and have a limited number of participants. The data collected during a pilot (or even several pilots) almost never is enough to build a predictive model. Adding to the difficulty is that the pilot volunteers are actually safer drivers (more on self-selection later) resulting in limited claims history around which to model the driving data. It's one thing to say mileage matters; it's another to use analytics to show that not every mile is equal in terms of risk, for example. The risk associated with any particular mile varies by road type, time of day, relative speed, and the frequency and magnitude of changes in speed. Insurers need lots of data to determine these risk factors.

UBI is segmentation strategy for insurers to find and acquire new customers who are safer drivers. From a pricing perspective, UBI success depends on granularity, variables, and interactions of the driving data. Actuaries love this stuff. Yet TSPs haven't made it easy to collect the

driving data – pilots are priced by the vehicle rather than by car years of data and get structured by the TSP's contract rather than by the insurer's objectives to understand acquisition, risk, and retention.

It's not all bad though. The good news is that those consumers who are attracted to UBI are better risks for insurers; this self-selection bias is helping to minimize some of the problems noted above. Self-selection lift can pay for a UBI program. TSP consolidation is also helping to clean up the ecosystem. As smartphones become viable data collection platforms, as the OEMs realize the value of the data they're sitting on, and as consumer telematics products emerge, the problems start to go away.

Today's version of usage-based insurance appeals to roughly 15% of the market – those safe drivers who are overpaying and are willing to share their driving data to prove they deserve a lower price. More transparency and improved Insurer-to-Insured (I2I) coaching is needed to penetrate beyond the early adopters. UBI enables a unique opportunity for insurers to connect with their insured customers. Insurers need to leverage telematics to become the advocate for safety, security and overall in-vehicle experiences. I2I connectivity is critical for the success of insurance telematics.



Dave Huber

President
Kairos Solutions

Dave has led all aspects of the development, pilot, and roll out of a number of Usage-Based Insurance products for U.S. insurers. He believes today's offerings provide just a glimpse of the segmentation power, adoption rates and connected technologies that will drive insurance telematics in the future. He also doesn't think it's as complicated as it's been made out to be.



Source: CarIQ

India's 1st connected car gizmo is here!

Take a look at the automotive sector over the years! It has progressed by long strides that have only been possible due to technology and its vast and wider fields of advancements. Technology plays a crucial role in how we look at our cars today. From being a travel oriented entity to something that's a part of our daily life. We spend so much of our time in our vehicles today that we fail to sit and observe

sometimes the long journey that cars have taken to provide what we call the "Bare Minimum" requirements of the 21st Century car.

Cars are way smarter than what they used to be 10 years back and with every passing day are only getting smarter than before. Equipped with state of the art technology, features like Push Start, automatic headlamps and wipers, power steering, fuel injection and the list goes on. The details behind why an engine



performs the way it does and how it adapts to the road conditions is all technology engraving itself onto the automotive sector. Some technology plays such a crucial role and yet we stand unaware of how it helps us.

We assume we know what's best for our vehicle and being auto enthusiasts we may, to a certain extent. After which we are always reliant on the garages and mechanics that look after our vehicles at particular set intervals. But do we know what's best for our cars? Leave aside the exterior care we provide, what about the things on the inside, and how certain can you be of those claims? You can't help but wonder what it would be like if you could talk to your vehicle.

Well that's taken care of too. Yes! And it's as simple as downloading an app for your phone! Based on the On Board Diagnostics, the device fits in your vehicle's OBD port from where it retrieves your

vehicles health via the ECU and displays all of that in a format that's simple to read, even if you don't boast of expertise in the field. Every error code received from the car's ECU is translated for you in a format that is simple to read.

And you thought your car couldn't complain? Look at the brightside, the next time the check engine light comes on you'll know for sure whether your car is lying. The next time you visit your garage guy, you can have a list compiled to check whether his claims match your car's claims. What else does this technology do? It gives you a detailed location history comprising of where you car has been how you've been driving it. Geo Fencing options are also available where you can set boundaries and if your car crosses these set boundaries, alerts can be sent to you via the app provided.

When your car meets with an accident, it can shout out to you and your near and dear ones via SMS and a set of other numbers you have assigned. If you ever do park your car in a no parking zone, the towing alerts will come in handy. Even if you do take pride in calling yourself a responsible driver, your car can help make you better by providing you with personalized driving tips based on the way you drive. Share your trips and compete with your friends and earn bragging rights as to which one of you is the best driver and has the most well maintained car.

Picture all this and it will seem like a thing of the future, but the future might just be around the corner. Here's an insight from the auto enthusiasts and the gadget freaks from CarIQ, painting you a picture of what we want tomorrow to be. A place where your car and you have an irreplaceable bond and where technology is put right, to give you a car ownership experience like none other. Who said technology made us lazy when all it did here was make us smarter?



Sagar Apte

Founder & CEO
CarIQ

Sagar is responsible for sales, operations, and marketing aspects of CarIQ's connected car business. He has over fifteen years of experience across diverse domains such as Product Management, Sales, Support, Operations, and Marketing.

Progressive Insurance on OEM-based UBI models and the roadmap ahead

A discussion with **Dave Pratt**, General Manager - UBI of **Progressive**

For years now, industry experts have debated whether or not UBI models would take off, and essentially re-orient the motor insurance industry. Various insurance carriers across the globe have tested UBI-based products while many other have thought or are implementing it at a slow and steady pace. There have been many successful profitable models around these products and few of them have gained a widespread success. The US-based Progressive Insurance is one such company which can be named as the 'inventor' of UBI or an 'undisputed' leader in this space. Progressive Insurance released its telematics offering, Snapshot, in 2011 and has continued to adjust its messaging and marketing tactics around the product ever since. It provides safe drivers the opportunity to earn a discount on their insurance based on their actual driving behavior. As a matter of fact, Progressive so far has collected over an overwhelming 10 billion miles of driving data and is still counting.

How has telematics been useful for the insurance industry in past few years?

Usage-based insurance is a huge shift in how consumers think about and interact with their insurance company. It reaches beyond traditional non-driving rating variables that have been used for decades to set pricing and it moves to measuring actual driving, which has proven to be the most predictive rating variable yet by carrying more than twice the predictive power than traditional insurance rating variables. It also gives consumers the opportunity to prove they're safe drivers. Because it's such a relatively new insurance concept, building awareness and educating shoppers about Snapshot has taken some time. We began

advertising Snapshot in 2011, and since that time, we've seen adoption grow. We've tested a number of different messages to explain the idea of UBI, and we continue to evolve our advertising and messaging. We think that continued awareness among consumers will drive adoption

What is the general consensus among insurance companies when it comes to this merging world of telematics and insurance? Why are some still not so enthusiastic?

We began our usage-based insurance program over 15 years ago, and over the years we've seen more competition in the space. In 2013, Snapshot was responsible for \$2 billion of Progressive's auto insurance written premium. There's clearly a market and the competition has taken notice. We're even seeing other carriers launching national advertising campaigns of their own, something we began in 2011. More advertising should lead to greater awareness among shoppers, driving even greater adoption.

You are collecting data from more than a million vehicles. What are some of the key findings/learnings of such huge amount of data? Were those helpful in expanding Progressive's UBI appeal in the market?

Traditionally, insurers have relied on non-driving variables to price



Progressive's Snapshot

insurance like age, driving record and marital status. Those non-driving variables are still used today, but measuring actual driving gives us even better insight. Snapshot gives drivers the chance to prove they're a safer driver and we've discovered that actual driving behavior carries more than twice the predictive power of traditional insurance rating variables.

Progressive's Snapshot has been acclaimed as the 'best UBI product so far'. What is the roadmap ahead for Progressive?

We believe opportunities to advance UBI may reside in the use of smart technology, like mobile and original equipment manufacturer (OEM) telematics. OEM's in-car technologies have the capability to transmit driving data, so we're exploring options like this that would ultimately replace the customer's need to plug in a separate device. We're also exploring using technology people already carry with them, like smartphones, to do the same measurement.

We're currently working with application developers to try leveraging mobile phones to measure customers' driving behaviors. There are a number of challenges to overcome, like distinguishing driving from other movement and the accuracy of the measurement, but this is a very entrepreneurial space right now and we're seeing promising results in our initial tests.

Google's Open Automotive Alliance (OAA) is working on standardizing the in-car data? Do you feel the need of having such data standards for UBI? Would this help in a long-race?

As the as the innovator in usage-based insurance, we built all of our systems from scratch and they're working well for our collection and analysis of the data. Because

we already have these systems working well, we haven't explored other data standards.

Snapshot must have undergone several changes as the market for UBI in Unites States matured. What were those changes exactly? What is the current status of Snapshot?

Progressive has been in market with its telematics program for more than 15 years. We've continued to evolve and change our program based on the insights we've learned from the data we've collected and to leverage the latest technology available. Progressive has seven U.S. patents covering usage-based insurance methods and systems.

Progressive began working on the concept in 1998 with a program called Autograph. In 2004, a new version of the program called TripSense® was piloted. Progressive rolled out MyRate® in 2008 and evolved the product into its current form, Snapshot in 2010. Over the years, the device has evolved from a large, mechanic-installed system to a sleek, pocket-sized device that plugs into a car's on-board diagnostic port.

Today, Progressive is the leader in usage-based insurance with more than 2 million vehicles that have participated in its program. We see about a third of customers who shop with us directly by phone or online opting in to the program. Since introducing its first wireless device in 2008, Progressive has collected over 10 billion miles of driving data and the program is available in 45 states and the District of Columbia.

Does Progressive have any plans to expand its outreach in the Asian market in the near future?

We are currently only looking at the U.S. market for our Snapshot program.



Dave Pratt

General Manager-UBI
Progressive Insurance

Dave L Pratt is looking after the companies UBI solution and market 'go-to' strategies. Prior to his current role, Pratt has held various other positions with Progressive, including countrywide leadership roles in marketing, product management and product development. Before joining Progressive, Pratt worked at Bain & Company in Boston, MA. He earned his bachelor's degree in electrical engineering from Duke University and an MBA from Harvard Business School.

FLEDGING OPTIMISM FOR A COLLABORATIVE TRANSPORTATION SECTOR

A discussion with **Atul Kishore**, VP - Connected Car of **AAA**



Connected car has gained huge traction over the past couple of years, resulting in an entirely new ecosystem of players, huge investments and multi-billion dollar ventures. While it is still unclear as to where the industry will go or what hurdles it will have to overcome, the prize for innovation has made the journey worthwhile for both corporations and start-ups.

In an interview with Telematics Wire, Atul Kishore of American Automobile Association (AAA) shares his visionary opinion on the connected car

technology and its roadmap ahead.

Can you tell us something about the on-going activities at AAA in the 'connected car' space?

Providing next generation connected car services to AAA Members, protecting the rights of motorists and improving safety and use of new vehicle technologies for consumers is a top priority for AAA. We are leveraging our nationwide fleet, AAA Approved Auto Repair shops, call centers and mobile application to be integrated with connected car technology to provide members with relevant information.

In your opinion, what are the advantages that the transportation sector is going to reap out of the connected vehicle services?

Approximately one-in-five new cars sold in the US this year will be connected, meaning the vehicle will collect and transmit data outside of the vehicle to improve safety and convenience for drivers. Within a decade, AAA expects the majority of cars on the road will be able to identify problems before breakdowns occur, use data to reduce crashes and help drivers save time and money. Connected cars have the ability to save lives when vehicles can

communicate with other vehicles about critical situations up ahead. Someday, an accident in a mountainous area could reduce the speed of all upcoming traffic to avoid a pileup, or caution the driver if an animal is sitting in the road ahead.

The connected car is creating a new landscape for the automotive industry and in-vehicle technologies are becoming a marketing advantage for OEM's. The aftermarket repair business is also expected to expand in number as they will need to provide enhanced diagnostics.

How do you think the connected cars paradigm is progressing worldwide? What are the services that are getting traction amongst users?

The connected car gained significant attention with the growth of smart phone technology. Users are accustomed to having information at their fingertips. Real time information such as weather conditions, navigation and vehicle service needs are likely to be attractive benefits for motorists to access in vehicle.

Location based Services (LBS) and safety and security will continue to be key "wants" globally. While some of the services may be marketed differently, the back-end system development is likely to be identical.

What is the future of connected cars in those regions that are still untapped (India, China, Brazil) or are in process of adopting this all-new technology?

There is large potential for this technology in India, China and Brazil. These countries have a large volume of cars and the data collected will benefit the world. The infotainment feature may be different but vehicle safety and engineering features will be the same.

In 2008 AAA, ARC Europe and the Australian Automobile Association founded the Global Mobility Alliance (GMA) to facilitate global collaboration

and information exchange between more than 70 GMA clubs in 33 countries. The GMA clubs represent more than 100 million members. The different entities work closely on many global initiatives.

There have been some region specific demands for connected car services. How do you think the automotive industry would cater to such diverse requirements?

Varying requirements are not unique to connected cars. Different regions have different vehicle requirements such as emission and safety standards (ISO, SAE, EURO, Bharat and FMVSS). Cars will be designed to meet regional requirements with customer preferences in mind.

Being a wireless and automotive industry veteran, how do you find that these two different industries can leverage each other's potential?

With the explosion of the smart phones, OEMs are changing their ways. Customers are demanding more features in their vehicle and will be making buying decisions based on these features. Cars last 15-20+ years, especially in emerging markets, so the key for manufactures and wireless companies will be to anticipate features that will be desired in older vehicles.

How far or close are we to the reality of being ubiquitously 'connected' while driving?

The timing related to market availability of connected cars varies by county. Larger countries with larger markets and more competition have a strong desire to get vehicles to market with this new technology. Cars have features today that brake, accelerate and park themselves today. New features are being added yearly. The technology of connected vehicles is improving at a steady pace, but legal bottlenecks, IP issues, standards and business objectives will prevent a fully ubiquitous vehicle from coming to market for 10 – 15 years.



Atul Kishore

Vice President
Connected Car Initiatives
American Automobile
Association (AAA)

Atul leads AAA's Connected Car efforts, including Automotive Engineering, the Member Vehicle Relationship Management initiative, Location Based Services (LBS) and partnering endeavors. He was involved in the launch of the first in-vehicle navigation and telematics systems at Nissan and was their first North American engineer to be sent to Japan to learn the Nissan Development Process. He worked in Nissan's electronics quality reliability and design sections. At Ford, Atul managed the development of a \$2 billion strategy for automotive emerging market localization and international joint-venture relationships.



INSIDE THE insurance industry's great **Big Data** Experiment

Usage-based insurance (UBI) has earned its reputation as a win-win for drivers and carriers. Policyholders can benefit from higher levels of service and lower rates by improving their driving, while insurers can increase retention and minimize adverse selection by identifying lower-risk policyholders and awarding appropriate discounts. But such benefits merely scratch the surface of what's possible for insurers that collect and use vehicle-generated data. Newer vehicles with self-driving capabilities reportedly produce up to 60 megabytes of content per second including data from vehicle engines, safety systems, entertainment and convenience features, cameras, and radars. That makes the data in today's UBI programs seem like a drop in the bucket.

The Three Vs of Big Data

Much of the industry uses the "Three Vs" — volume, velocity, and variety — model to describe big data. And each of those "Vs" plays an integral

role in UBI. Applying a big data mindset to telematics can help turn auto insurance's great experiment into its greatest success story. For UBI to emerge, the property/casualty industry must make good on its great big data experiment.

Volume

According to studies, advanced statistical methods require approximately 100,000 years of data to produce credible insights. That volume, while more a guideline than a commandment, can be useful when preparing insurance rating plans and particularly in helping those plans pass muster with insurance regulators.

Fortunately for UBI, statistical methods need not involve policyholders installing a telematics device in their vehicle for 100 USD. One year spent observing 100,000 vehicles is an equally viable alternative. Achieving that volume can be pricey; however, the state-of-the-art devices (also known as

dongles) that support many UBI programs cost about \$100 per unit. Those devices, which plug into the on-board diagnostic ports located under most vehicle dashboards, also typically require additional monthly wireless costs to transmit the data. So insurers need to consider how to reduce the cost of data collection.

Reliable alternatives to the dongle are evolving. For example, smartphones have most of the requisite technology, such as accelerometers and cellular transmitters, to support UBI. One provider in the European Union offers a smartphone app that collects 200 miles' worth of driving data for use in determining a discount. While such apps cut hardware costs by repurposing technology that a policyholder likely already possesses, they can also compromise data integrity, since drivers can turn off their phone during particularly risky trips. Operational complexities, such as providing a consistent experience across operating systems, may also exist.

A more viable long-term strategy might involve a hybrid approach that uses a simpler and less expensive dongle to interact, such as using Bluetooth, with policy holder smartphones. Alternatively, some insurance companies are developing affinity partnerships with auto manufacturers to use factory-installed technology.

Velocity

Many carriers typically view UBI favorably when pricing and underwriting auto policies because telematics data measures driving behavior directly, often outperforming traditional rating variables such as age, gender, and credit score. However, unlike those rating variables, UBI typically requires the installation of technology, several months of behavioral monitoring, and a waiting period before the pricing or underwriting decision will apply.

That certainly isn't the velocity one would expect from a big data environment. A better solution arguably would offer instantaneous benefits to policyholders who opt in to UBI programs.

Many insurers have taken steps to improve the speed and convenience of their UBI programs. Some carriers make provisional discounts available during a policyholder's telematics observation period. In the future, others may use UBI to provide accident and breakdown coverage, which is perhaps the most immediately actionable use of telematics data, potentially benefiting both insurers and policyholders through loss minimization and speedier claims processing.

Policyholders may soon have the choice to opt in to an industry wide behavior-based scoring program. Such a program will use vehicle-generated data to produce a score that represents how safely drivers operate their vehicles, how safe their routes are, and how well they maintain their vehicles. Those portable scores would allow policyholders to dispense with the classic observation period when they shop for insurance, narrowing the convenience gap between UBI and a motor vehicle report or credit history score. Of course, a portable score would likely require a centralized data repository. For UBI, candidates in the auto arena include original equipment manufacturers (OEMs), industry advisory organizations, consultants, and telematics service providers.

Variety

Telematics devices collect data quickly and often (at least once per journey, but more typically several times per minute), helping UBI live up to most people's definition of big data. However, without global positioning system (GPS) coordinates, the variety of telematics data tends to be limited to a relatively small set of core data elements mileage; speed; select engine

information, such as revolutions per minute; and acceleration, braking, and cornering, or what's commonly known as the ABCs of risky behavior.

GPS data provides greater variety allowing actuaries to produce rich data sets that can yield deep insight into the driving experience. Insurers can derive a wealth of data from GPS coordinates. They can use GPS data to help assess the overall riskiness of a vehicle's routes by associating the data with databases containing information about traffic generators, traffic density and composition, and weather and terrain. Doing so likely offers a significant advantage over traditional ratemaking that considers only vehicle garaging location. For example, a commuter who drives from the suburbs into the city for work may receive a much different rate than one who takes the exact same roads at precisely the same time every day but in the opposite direction. UBI helps allow the policyholder who makes the reverse commute to receive actuarially supported discounts.

Even greater insights can come from associating GPS coordinates with road atlas databases to determine factors such as proximity to an intersection or how fast the vehicle was traveling relative to the posted speed limit. Proprietary algorithms can intuit road geometry. By employing such advanced models, carriers can derive thousands of multidimensional driving data variables to estimate the riskiness of driving patterns.

Antoine de Saint-Exupéry observed that "perfection is achieved, not when there's nothing more to add, but when there is nothing left to take away." The actual big data challenge for insurers offering UBI may not be to access more data but to distill and communicate the insights they derive from that data into a seamless customer experience.

At the end of the day, the insurers that fail to do so may be casualties of the industry's pursuit of perfection. ■



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Jim Weiss, FCAS, MAAA, CPCU, is manager, Personal Automobile Actuarial, ISO Insurance Programs and Analytic Services, at Verisk Analytics. He has a strong inclination for R&D and involved in predictive modeling projects from inception through launch. He is a prize-winning author and frequent presenter; comfortable conversing with clients and regulators. He enjoys navigating dangerous waters of "big data" alongside multidisciplinary team of experts.



WHY CAR INFOTAINMENT SYSTEMS ARE HEADING FOR A SHAKE-OUT

The introduction of Apple's CarPlay, Google's Open Automotive Alliance and to a lesser extent Microsoft's Windows in the Car heralds a tipping point in the industry.



2014 might well go down in history as a watershed year for car infotainment systems. This is the year that internet-era giants like

Apple and Google are getting serious about their presence in the car. If the evolution of technology in people's vehicles is anything like that on people's phones, the incumbents in in-vehicle infotainment are heading for rough seas. Are car makers repeating the same mistakes that mobile operators made a few short years ago? There are certainly some eerie similarities.

The introduction of Apple's CarPlay, Google's Open Automotive Alliance and to a lesser extent Microsoft's Windows in the Car heralds a tipping point in the industry. Here are three players that have a deep expertise in fostering vibrant communities of innovators and entrepreneurs that discover new use cases for technology. There is now a realistic and acute possibility that these new entrants will sweep away the existing car app platforms with a dominant, over-the-top solution, just as they did in the smartphone world. To understand how that is possible, we need to recognize a key change in people's expectations.

A new basis of competition in the car industry

Today's mainstream cars are fairly limited in functionality. One might say that they have 4 "apps": driving from A to B (obviously), climate control, music (AM/FM radio, CDs, and more recently internet radio) and GPS navigation. The selling points for cars and infotainment systems are driving performance, reliability and brand identity (including the level of luxury inside the car). What you can actually do with your car and how it integrates in your (digital) life is not part of the sales pitch.

This is changing rapidly

Mobile phones used to be for calling or texting people. Today's Android and iOS smartphones can do so much more, thanks to millions of apps that cover every imaginable use case - and quite a few unimaginable ones. Once people have gotten used to that vista of possibilities, they want it everywhere, including in their cars. People's expectations shift. A 2013 study by Accenture showed that the majority of car buyers cares more about the in-car technology than about driving performance. This new basis of competition for car infotainment systems sets the scene for a shake-up in the industry.



Stijn Schuermans

Senior Business Analyst
VisionMobile

Stijn Schuermans is a senior business analyst at VisionMobile, a UK research company known for its research on mobile app developers and developer-centric business models. Stijn is the author of "Apps for Connected Cars? Your Mileage May Vary", the report that puts developers in the driver's seat, painting a picture of the connected car space from their perspective.

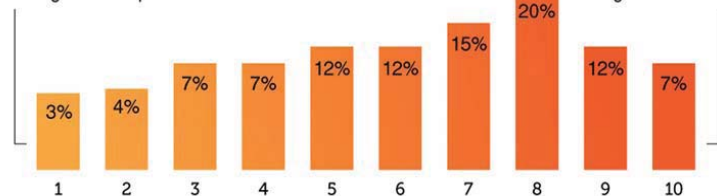
IN-CAR TECHNOLOGY IS DRIVING PURCHASE DECISIONS

Driving performance is becoming less important for consumers

On a scale from 1 to 10*, what score would you assign for your view?

The cars driving performance has the greatest impact

The in-car technology has the greatest influence



*10 meaning that in-car technology has the greatest influence over the car purchase decision and 1 meaning that the car's driving performance has the greatest impact on the car purchase decision.

Data: Accenture consumer survey | Dec 2013 | www.accenture.com/connectedvehicle

The ruling class of in-vehicle software platforms

Apple and Google are newcomers in the existing market of in-vehicle infotainment platforms (IVI). Some car makers develop their own proprietary systems. Most don't start from scratch, but use an existing car-optimized operating system. This market is dominated by two players: Blackberry's QNX CAR (acquired by BlackBerry in 2010, QNX also provides the technology behind the BB10 smartphone OS) and Microsoft Windows Embedded Automotive (most famously providing the technology for Ford SYNC). ABI Research puts their combined

purpose is to provide a starting point that reduces the costs and risks of developing an IVI system, relative to build a custom implementation for each new car model. The QNX and Windows platforms are not designed, however, to make it easier for external innovators to create, distribute and monetize apps. Quite the opposite, in fact, as locked-down platforms help car makers differentiate their vehicles.

Apps are important because they give users choice. They allow users to personalize their devices (vehicles in this case), and to update their devices with the latest and greatest at all times. Every user is different.

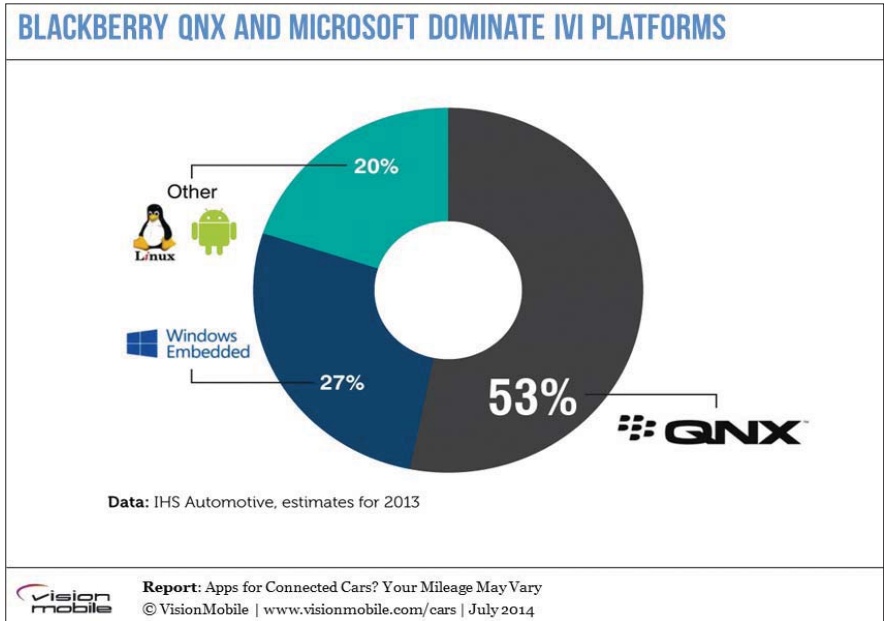
and that's a problem. Just like Symbian and BREW in the mobile industry, the purpose of QNX and Windows Embedded Automotive is to reduce the costs and risks of developing an IVI system. What they fail to do is to leverage a developer ecosystem to create massive value for end users by uncovering new use cases and user needs.

Can the Linux challenger turn the tide?







"Linux to Take the Lead in Automotive Infotainment Operating System Market", titled a recent press release (IHS Automotive, Nov 2013). Indeed, the car industry is getting all revved up about the GENIVI platform, a Linux-based challenger to QNX and Windows developed by an alliance of all the best and brightest in the industry. Will the challenger GENIVI be able to turn the situation around in the IVI market?

GENIVI offers a set of introductory videos on its website. The keywords that stand out from those videos are "open source" and "re-use". Open Source, because GENIVI has high hopes that their platform will get open source developers excited about the car industry and produce free platform improvements. Re-use, because the GENIVI platform enables middleware to be developed only once by a centralized team, freeing resources elsewhere (at OEMs and tier-1 IVI suppliers) for new innovation. In both cases, the focus is once again squarely on cost reduction. GENIVI believes that this new-found innovation power will help them "meet consumer needs" and "keep up with consumer electronics". History tells us that without a vibrant developer community (as of yet non-existent), this is idle hope.






Whereas QNX and Windows Embedded Automotive resemble Symbian and BREW in the mobile world, so does the GENIVI challenger have a mobile counterpart. GENIVI is the new LiMo. (Quite literally so, in some sense, with many of the same people and organizations behind




APP ECOSYSTEMS HAVE SUPERIOR ECONOMICS

	software platform	communications platform	app ecosystem
examples	symbian 	 	  
participants	handset makers	users	users and developers
wins by	sharing costs and risks of software development	connecting large number of users	connecting users with developers
economics	economies of scale	same-side network effects	same- and cross-side network effects with winner-takes-all dynamics
growth potential	linear	quadratic	exponential

APP ECOSYSTEMS HAVE SUPERIOR ECONOMICS

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have come to expect. Car OEMs have understood this as well. More and more, car makers are shifting their focus from the IVI platform itself to providing integration with smartphones. This is obvious from the wealth of initiatives in this direction: MirrorLink (by the Car Connectivity Consortium), Ford's AppLink now open sourced as Smart Device Link, Apple's CarPlay, platform players such as Airbiquity or CloudCar, and now the Open Automotive Alliance from Google. As a part of this trend, car makers are also starting to understand the importance of car app developers in the value creation process. Car OEMs are opening app stores and developer programs, mimicking the tactics of the smartphone world.

both projects.) LiMo's faith is well documented. Suffice to say that LiMo, now Tizen, has yet to demonstrate its potential after 5+ years of development, due to a fundamental misunderstanding of what makes a platform successful in the market. GENIVI is very likely to go down the same route, for the same reasons.

The road ahead for car IVI platforms

By drawing a parallel with now-dead platforms in the mobile industry, it becomes clear that none of the current operating systems being procured by car makers extend their proposition to entrepreneurs to create the innovation that consumers

Will car IVI platforms like BB QNX, Microsoft and GENIVI die? Not entirely, not anytime soon. If someone succeeds in establishing developer ecosystems around car apps, however, the relevance (and their pricing power in the value chain) of engineering-oriented platforms will soon dwindle.

Having Complicated and inefficient coupon systems ???



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NO MORE DISTRACTION WHILE DRIVING



Could you please tell us something about reQall's areas and business of operations and its context-aware, intelligent products?

reQall is a global company with a singular mission to transform the messaging experience while driving. It fundamentally improves people lives by contextually minimizing interruptions, saving people time, and reducing the daily deluge of messages.

reQall's Intelligent Inbox Assistant Reqallable (<http://reqallable.com/>) automatically distills all incoming messages (email and text) into just the ones that are important, contain actionable content, and merit attention. We focus on identifying actionable, attention- worthy content from messages. The entire technology is flexible enough to run entirely on the device or the cloud. This experience can be embedded into any connected device (mobile phones, cars, wearables, smart TVs etc.)

Can you give our readers a brief overview on how reqallable InCar (beta) will contribute to reduce phone, text and email distractions while driving?

reqallable InCar on Android prioritizes messages from important contacts, and then distills the content to just the parts you need to take action on. These email or text messages are automatically read out to you, and the user has the option to respond by simply speaking. This means fewer interruptions while you are driving, and you don't have to worry about missing important emails or fret about not being able to answer. The driver can keep his or her eyes on the road and hands on the steering wheel. The user interface is quite simple.

All interactions are via voice. The most important people, the email action items that are important, directions to the next destination (based on the address shown in the calendar entry) and a microphone icon are included.

The US Department of Transportation (DOT) wants to regulate navigation apps and aids to arrest distracted driving. Do you think the new app would be in compliance with this regulation?

In the US, 40% of drivers use cell phones for texting while driving and 60% use cell phones while driving. During the course of the day, the





average person checks a cell phone approximately 110 times and up to every 6 seconds in the evening! During driving it is hard to break that ingrained habit. reQallable InCar makes use of smart phones in the car safer than current practices of people who use their phones to read emails and text while driving. What we aimed for is a "no glance" experience so that the driver can keep hands on the wheel and eyes on the road.

The laws that restrict cell phone use in the cars vary from state to state. ReQallable InCar puts safety first and helps reduce the distracted driving of current.

How is the new app benefitting the infotainment industry?

It is a complete voice-driven experience and maintains the connected experience. Many people regard email and text communications as an essential-to-have service. Much of what is currently available in the infotainment industry is a nice-to-have.

How do you think the in-car apps are making headway worldwide? What are the services that are getting traction amongst users?

I think the most essential in-car apps are navigation and communications (email and texting) followed by giving the user the awareness of what is around their location in terms of services such as food, shopping and such. The traction is significant for navigation and for location-based services. The ability to receive email and texts as well as the ability to communicate via email and text in a safe manner will be widely adopted and hence our significant investment in this area. In the future, I anticipate tighter integration with vehicle sensors to offer added services.

We intend to continue to provide our context-based email and communication services into automobiles as well as with wearables and other devices. We would like to deploy our technology as part of the Internet of Things wherein every device is connected and offers value-added services.



N Rao Machiraju
CEO
reQall Inc

Rao is responsible for the overall strategy and direction of reQall Inc. He was a Principal Scientist at Apple Computer for over ten years, heading various groups including the Learning Lab, one of Apple's three research labs. He holds six patents in computing. Rao is a member of Board of Councilors of NSF's Center on Multi-Media Computing (IMSC) at the University of Southern California and serves on the Advisory Board of the Edward De Bono World Centre for New Thinking based in Malta.

Gracenote's connected music solutions to be available in 2017 car models

Gracenote has launched a new connected music solution for automakers that will help create on a common platform to unify all of the various music sources within the car's head unit. This Gracenote technology will be available for 2017 model year cars. Gracenote's solution will enable drivers to link their musical experience from traditional radio to their favorite streaming music services through a consistent user interface, regardless of the source, and deliver high quality metadata to the car's display. This is because consumers are now listening to their favorite artists and tracks beyond AM/FM radio, CDs and



Source: Gracenote

satellite radio i.e. on subscription-based streaming music services, Internet Radio services as well as downloaded music stored locally on their device. The dizzying

amount of choice and feature sets creates a very disparate music experience for the listener. And Gracenote's connected music solution is a welcome relief for it!

Omnicom enters Italian transport telematics market with its fuel level sensors

Omnicom has announced entering the transport telematics market of Italy introducing its highly accurate fuel level sensors and other solutions at Smart Mobility World in Turin, Italy. The decision to head towards Europe and namely Italy is due to ever increasing demand for precise transport telematics equipment in order to effectively reduce fleet expenses. It is known, that 30% of such expenses are fuel consumption. The company's international business development team is exploring Italian transport telematics market which is growing. According to TTS Italia, 5,000,000 medium and heavy vehicles are registered in Italy, 91% percent of which conduct regular shipments. Major players of the market realize the necessity to provide more value to end customers in their fleet management solutions.

Bosch unveils Mid Range Radar (MRR) sensors for ADAS and adaptive cruise control

Bosch is developing front and rear versions of its flagship product- the Mid Range Radar (MRR) sensors. This radar sensor forms the basis for a range of safety and comfort functions that can increasingly be offered in medium-sized and compact classes, and at competitive prices. MRR technology is based on fourth-generation Bosch radars and significantly smaller and lighter than a 250-gram pack of butter.



Source: Bosch

A leading European manufacturer (anonymous) is putting Bosch's MRR rear mid-range radar sensor system for rear-end applications into series production. Whenever another vehicle approaches at speed from behind or is already present in the blind spot, a signal such as a warning light in the side mirror alerts the driver to the hazard. Should the driver still activate the turn signal with the intention of changing lanes, the lane-changing assistant issues an additional acoustic and/or haptic warning.

Zubie warned about cyber security vulnerability in its in-car USB dongle

Argus Cyber Security and Zubie have reported that a security vulnerability was found by Argus in Zubie's device. After being duly notified by Argus, Zubie took decisive and swift action in fixing the problem, as it relates to consumer safety. As part of its ongoing research, Argus found that Zubie's product was vulnerable to a wireless remote takeover. If left unaddressed, this gap would have enabled the installation of a malicious malware that could potentially influence a vehicle's critical systems. As part of its ongoing research, Argus found that Zubie's product was vulnerable to a wireless remote takeover. If left unaddressed, this gap would have enabled the installation of a malicious malware that could potentially influence a vehicle's critical systems.



Source: Zubie

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Blaupunkt India unveils car stereos for the low end infotainment market



Blaupunkt India has launched two new car stereos for the Indian market in Mumbai. Called Tokyo 110 and Manchester 110, they are aggressively priced at Rs 4,990 and Rs 5,990 respectively.

They were launched worldwide in July 2014 but have just been launched in India. These single-DIN audio players are aimed at building the lower end of Blaupunkt's in-car entertainment system portfolio in the country. Both these systems support USB and SD card playback and come equipped with an aux-in, FM/ AM capabilities, blue backlighting and remote controls. The difference between the two is that while Manchester 110 comes equipped with a CD player, Tokyo 110 does not. Both units come with a two-year warranty as well.

These two products allow Blaupunkt to target the extreme low end of the in-car entertainment system market in India. The company says its primary target audience includes fleet taxis, second-hand cars, and cars devoid of entertainment systems. They are looking to capitalise on consumers looking for an economical solution to their car infotainment needs.

Elio Motors to launch telematics in new hyper-efficient Connected Car



Source: Elio Motors

Elio Motors says it will offer the SkyzMatic vehicle connectivity system from technology innovator Infinite Skyz to provide customers connected car features including in-vehicle VoIP calling and Wi-Fi, remote vehicle monitoring and alarms, remote start and lock/unlock and navigation. The Elio ultra-high mileage vehicle, slated to launch in late-2015, will get up to 84 MPG and cost just \$6,800.

The connectivity will also provide Bluetooth 4.0, in-vehicle Wi-Fi internet access, camera monitoring and logging, vehicle location monitoring and accelerometer data monitoring. All of the information provided by the SkyzMatic system will be transmitted directly to an iPad or iPhone. All of the remote features will be transmitted with an iPhone or iWatch.

Octo to use Sierra connectivity for Super Easy Telematics Box

Octo Telematics has collaborated with Sierra Wireless to provide connectivity for its innovative usage-based insurance (UBI) solution in Europe.

The Super Easy Telematics Box from Octo is the first on-board telematics unit that is designed to be easily installed by the end customer, eliminating the need for professional installation. Once installed, the box captures telematics data such as time of day and driving patterns, returning them to Octo, which then provides a driver score to the driver's insurance agency. Additional services that may be supported are automatic crash notifications,



Source: Sierra Wireless

breakdown assistance, theft prevention and recovery, and personalized insights on how drivers can improve safety and fuel efficiency.

NXP, Honda, Siemens and Cohda Wireless launch smart car and ITS corridor in Europe



Source: NXP

NXP has teamed up with industry leaders to launch a 'Communicating Cars' test drive along the ITS (Intelligent Transport Systems) Corridor across Germany, Austria and the Netherlands. The tour will see a convoy of Honda smart vehicles drive through 1300 km of roads, including ITS test fields in Munich, Vienna and Helmond fitted with Siemens intelligent traffic infrastructure. The demo cars, which are fitted with leading

and secure NXP communications technology, will showcase the benefits of smarter traffic control including improved road safety and reduced pollution. As a leader in the field of connected cars and pioneer of secure Vehicle-to-X (V2X) technology – vehicle-to-vehicle (V2V) and vehicle-to-infrastructure (V2I) communication – NXP Semiconductors initiated the 'Communicating Cars' test drive along the European ITS Corridor.

Qualcomm agrees to buy CSR to address IoE and automotive opportunities

Qualcomm has agreed to buy UK chipmaker and Bluetooth-giant CSR Plc for £1.56 billion (RM8.14 billion) to expand in technology for automotive and wearable devices. The announcement has been made two months after CSR rejected a bid from Microchip Technology Inc. The acquisition complements Qualcomm's current offerings by adding products, channels, and customers in the important growth categories of Internet of Everything (IoE) and automotive infotainment, accelerating Qualcomm's presence and path to leadership. This opportunity is aligned with Qualcomm's established strategic priorities in these rapidly growing business areas.

At £9.00 per share, the acquisition of the entire issued and to be issued ordinary share capital of CSR is valued at approximately £1.6 billion. This cash offer has been unanimously recommended by the CSR board of directors.

Ford taps Mishor 3D to bring augmented reality navigation in its future models

Ford Motor tapped Israeli startup Mishor 3D to bring augmented reality navigation systems to its future car models. Mishor 3D develops a technology that projects navigation routes, road safety alerts, and places of interest onto cars' windscreens so that the graphics seem to appear as if they're on the road itself. The company uses Head-Up-Display systems that project digital images onto either the windscreen or a glass mounted to it. Ford is paying Mishor an undisclosed sum to tailor the technology to Ford's cars, and is considering rolling out the augmented navigation systems with both high-end and mid-range models. Alongside the navigation route itself Mishor 3D's system can present the driver with points of interest, like nearby restaurants, gas stations and cash machines, by placing symbols over nearby buildings.



Source: Ford

Alpine announces new iLX-007 in-dash receiver with CarPlay display

Alpine announced its first aftermarket in-dash receiver with support for Apple's CarPlay feature for iPhone users. The new Alpine iLX-007 will be the company's first display to support CarPlay following Pioneer's rollout of the feature to its latest NEX displays earlier this month. It features a 7-inch capacitive touch screen comparable to Pioneer's high end NEX8000 CarPlay compatible model (\$1,400), but at a much lower price point of \$800 as it lacks other hardware features.

Alpine's CarPlay offering is still one of the first on the market and joins Pioneer in allowing drivers to have CarPlay without buying a new car. Alpine's approach is closer to a dedicated display intended for use with the iPhone and CarPlay with a button on the unit dedicated to Siri. Alpine says its new iLX-007 in-dash receiver is now available through select authorized Alpine retailers with a suggested price of \$800.



Source: Alpine

Volkswagen and TomTom join forces to develop 'Highly Automated Driving' systems

TomTom (TOM2) and Volkswagen Group Research announced that they have signed a Memorandum of Understanding to join forces for the development of Highly Automated Driving (HAD) systems. The goal of this research co-operation is to jointly develop the digital map that is essential for automated driving. The two partners bundle their competencies by combining TomTom's expertise in map content and map making with Volkswagen's know-how about the car as

well as automated driving. The development of automated driving systems is highly complex. TomTom and Volkswagen aim to solve a part of this puzzle and have declared that they will jointly accomplish this. TomTom and Volkswagen Research are working on a concept based on the "Navigation Data Standard" (NDS) to deliver scalable and cost effective automated driving systems that do not require expensive hardware.



Source : Volkswagen

Tata Motors officials visits Microlise in conjunct to the fleet telematics partnership



Source: Microlise

Microlise has welcomed a delegation of senior management from Indian company Tata Motors. Recently, Tata Motors has signed a multi-million pound 5(FIVE) year contract with Microlise to integrate fleet telematics solutions

into its entire range of commercial vehicles. The visit follows the announcement of partnership, which is set to revolutionize the Indian transport sector. During the week-long visit, the delegation from Tata Motors met with existing

Microlise customers to learn how telematics are being used within the UK and in Europe. An event to celebrate to the partnership was held with business leaders from Nottingham and representation from UK Trade & Investment.

NVIDIA's Tegra-powerd Android infotainment system to be featured in Honda vehicles

NVIDIA announced that its Tegra mobile processor will power the new Honda Connect in-car audio and information system in the 2015 Honda Civic, Civic Tourer and CR-V, which will be launched in Europe next year. By integrating the Tegra automotive-grade processor, Honda becomes the 19th global automaker (and the first in Asia) to utilize NVIDIA technology for in-vehicle infotainment applications.

Leveraging the powerful, yet energy-efficient automotive-grade NVIDIA Tegra processor, the Honda Connect infotainment system is easy and intuitive to use. Its fast response to touchscreen gestures like pinch, zoom and swipe provides consumers the same experience that they expect on their smartphones and tablets. The Tegra-powered system drives a 7-inch capacitive touchscreen display for satellite navigation,



Source: NVIDIA

AM/FM/DAB, rearview camera and vehicle information. Access to the Honda App Center enables compatible apps for use on the touchscreen, such as Aha Radio.

China: GM becomes the first OEM to introduce OnStar 4G LTE service

GM **Built-In Wi-Fi Hot Spot Coming in 2014**

- Faster Mobile Data Speeds
- Streaming Video in the Back Seat
- Enhanced Safety and Telematics Features
- Added Real-Time Services

Source: GM

Shanghai General Motors becomes the first automaker in China to offer embedded 4G LTE services in its vehicles. The first Shanghai GM offering to be equipped with OnStar 4G LTE will be a Cadillac model in 2015. Cadillac_Model_2015 Vehicle owners will enjoy high-speed

data made possible by a new OnStar 4G LTE connection in the vehicle. Deployment of OnStar 4G LTE connectivity technology will provide improved OnStar safety and security services and new features such as a built-in Wi-Fi hotspot. Shanghai GM expects to announce its 4G LTE carrier

partner in the coming months. Existing OnStar services include Automatic Crash Response, Turn-by-Turn Navigation and On-Demand Diagnostics. A 4G LTE connection enhances the speed and performance of these services, in addition to introducing new features like Wi-Fi.

Masternaut launches app for monitoring business mileage & submitting

Masternaut has launched an iOS and Android companion app for the Masternaut Tax & Expense module, offering customers automated and completely accurate mileage logging to support expense claims and compliance regulations on the move. The Masternaut Driver Companion app, available now via iOS and Android app stores, links mobile users to the Masternaut Tax & Expense module, part of a suite of modules for Masternaut

Connect. The Tax & Expense app uses patented CAN-bus based technology that precisely reports vehicle odometer readings, which is more accurate than GPS-based calculations that many other solutions use. The Tax & Expense app simplifies and automates the processes involved and provides drivers on the move with an easy to use method of monitoring business mileage and submitting expense claims painlessly.



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CERTIFICATIONS:



S 101

Ruggedized IP67 Enclosure

U 101 V1

Parameters	Description
GSM Module	Quad Band GSM, GPRS: class 10 / 12
GPS Module	66 acquisition-/ 22 tracking channels, Ultra high tracking/navigation sensitivity: -165dBm1
Antennas	GSM-GPS Internal Antenna
Communication Interface	TCP/IP on GPRS.
Record Storage/Buffer	5000 Tracking Records.
Ports/Interface	1-USB Device type, 1 Analog I/O and 2 Digital I/O, 1 Ignition, 1 Voice channel (optional)
Speed Sensor	GPS(default)
Motion Sensor	NA
LED Indication	Processing, GSM, GPS, USB Detection
Connectors	6 Pin power mate connector
Power Supply	Wide DC input voltage range (9V - 32V),
Internal Battery	1500mah, 5 to 8 Hr backup,
Enclosure	ABS Plastic Casing IP67
Temperature	Operating: -10°C to +55°C Storage: -10°C to +85°C
Dimension (mm x mm x mm)	98L x 73.1 W x 25 H in mm
Weight	160 grams

Parameters	Description
GSM Module	Quad Band GSM, GPRS: class 10 / 12
GPS Module	66 acquisition-/ 22 tracking channels, Ultra high tracking/navigation sensitivity: -165dBm1
Antennas	GSM-GPS Internal Antenna
Communication Interface	TCP/IP on GPRS.
Record Storage/Buffer	20000 Tracking Records.
Ports/Interface	1-USB Device type, 1 Analog I/O and 2 Digital I/O 1 Ignition, 1 Voice Channel, Serial Port
Speed Sensor	Real time(optional), GPS(default)
Motion Sensor	Accelerometer
LED Indication	Processing, GSM, GPS, USB Detection
Connectors	8 Pin power mate connector
Power Supply	Wide DC input voltage range (9V - 32V),
Internal Battery	1500mah, 5 to 8 Hr backup,
Enclosure	ABS Plastic Casing IP67
Temperature	Operating: -10°C to +55°C Storage: -10°C to +85°C
Dimension (mm x mm x mm)	115 L x 80 W x 25 H in mm
Weight	165 grams

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- Polygon geo-fencing
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- Ruggedized IP67 Enclosure

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Door Sensor



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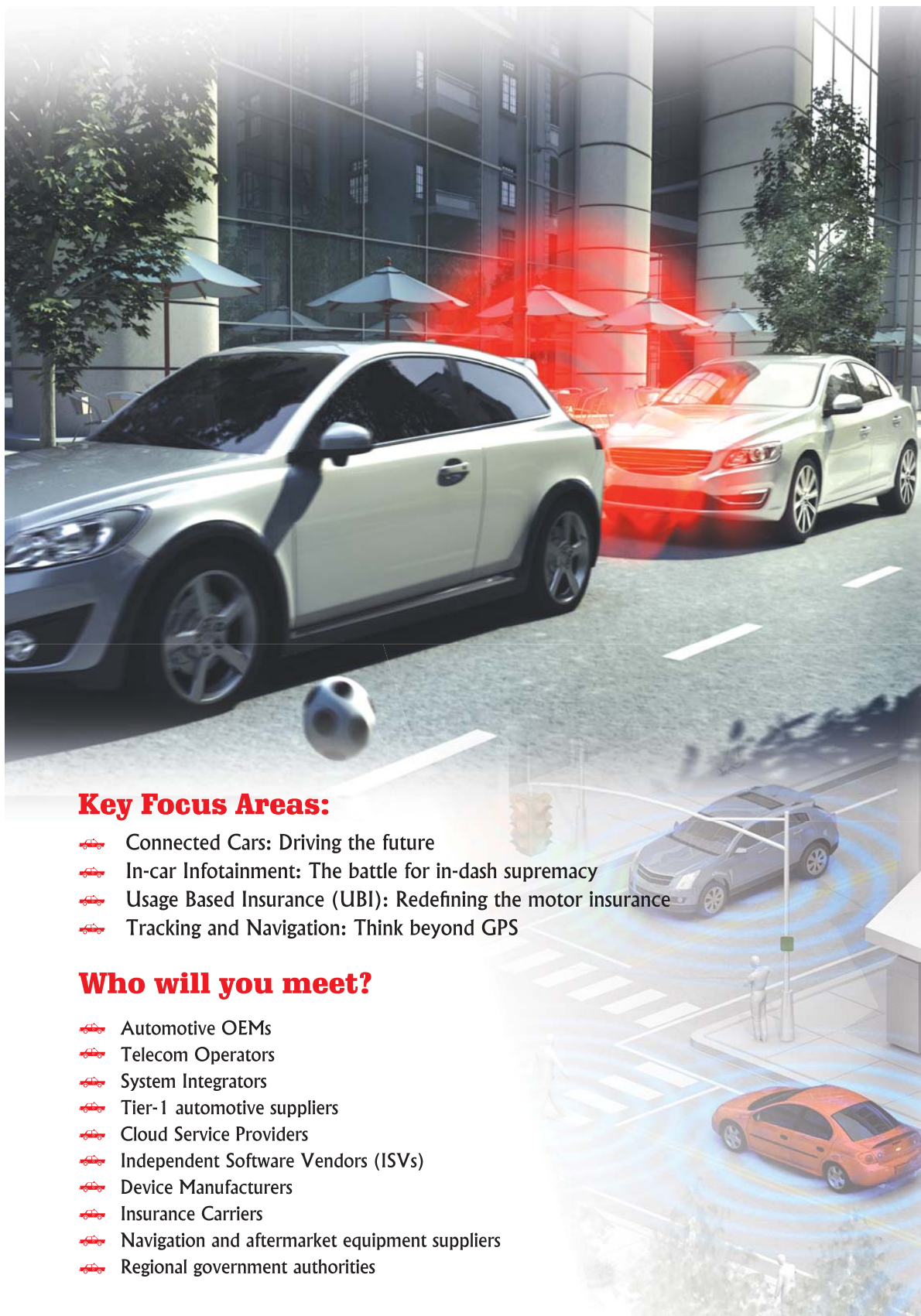
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Key Focus Areas:

- 🚗 Connected Cars: Driving the future
- 🚗 In-car Infotainment: The battle for in-dash supremacy
- 🚗 Usage Based Insurance (UBI): Redefining the motor insurance
- 🚗 Tracking and Navigation: Think beyond GPS

Who will you meet?

- 🚗 Automotive OEMs
- 🚗 Telecom Operators
- 🚗 System Integrators
- 🚗 Tier-1 automotive suppliers
- 🚗 Cloud Service Providers
- 🚗 Independent Software Vendors (ISVs)
- 🚗 Device Manufacturers
- 🚗 Insurance Carriers
- 🚗 Navigation and aftermarket equipment suppliers
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