The quest for telematics 4.0
Dialogue with the value chain:
Munich executive roundtable summary
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The number of connected devices worldwide is predicted to triple from more than 9 billion today to 25 billion by 2020.\(^1\) With around 12 billion of these devices being connected by mobile technology, Telematics 4.0 – the seamless integration of mobility and the web – is a source of huge opportunity.

To realize the full potential of telematics in the automotive sector, all stakeholders need to focus on the creation of value-added services – and the delivery of those services to end-customers. This should generate the critical mass needed to build a win-win ecosystem.

To gain more insight into the strategic priorities facing stakeholders, EY’s Global Automotive, Telecommunications and Insurance Centers recently brought together more than 25 senior decision-makers from across the telematics ecosystem.

This was the second in our series of telematics roundtables. The previous dialogue, held in Detroit, had highlighted how greater collaboration between market players, especially telcos and automakers, would be key to realizing the telematics opportunity. Delegates there agreed that stronger partner management skills were essential to ensure effective delivery of end-to-end portfolios.

This year’s event, held in Munich, developed the theme of collaboration, as well as investigating how players can leverage (and measure) real value from telematics. During a day of far-reaching debate, we brainstormed ideas in two key areas:

- Creating the win-win ecosystem
  - What is the role of different stakeholders?
  - What will the winning customer solution look like?
  - Potential areas of friction between stakeholders
  - Realizing the enterprise value of telematics
  - Leveraging big data from car-web integration
  - Bottlenecks to realizing enterprise value
  - Metrics for measuring enterprise ROI from telematics

So how best to create a telematics ecosystem where all players are incentivized to cooperate? A high priority is to convince OEMs that a broader network of partners will add value to the vehicle. Until a constructive and collaborative OEM solution is developed, we should expect to see significant interest and growth in aftermarket services such as usage-based insurance. Clearly, new business models are needed to satisfy product planning, product development, sales and marketing, and aftermarket teams across the ecosystem. On the consumer side, there is still a lack of understanding around exactly what services people will be willing to pay for – as well as how the various privacy hurdles surrounding data can be overcome.

In the following pages, we summarize the key findings from our roundtable, highlighting the opportunities and challenges that lie ahead for all players in the telematics marketplace.

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1. Source: GSMA, the global wireless industry trade group
Executive summary

- **Collaboration across the ecosystem** – A priority for all stakeholders is to generate the critical mass needed to drive telematics forward. Key to this will be the creation of services that deliver added value to consumers. As they assess the best approach, players recognize that growth through partnerships is critical. But how to choose the right partner for success? Will OEMs be willing to open their vehicles out to other service providers?

- **Revenue models and value realization** – Stakeholders are grappling with the need for a viable business model. The most significant value will come from telematics-enabled data. But this value will be realized in different ways. OEMs are interested in maximizing sales of new vehicles and parts. Insurers are focused on risk selection and driving behaviors. The current value chain is extremely complex due to the number of different stakeholders. This makes it hard to share revenue for value-added services.

- **The data challenge** – The ability to identify the data that matters, owning it and analyzing it, will be key. Many issues must be addressed. Who can package data? What is the impact of data privacy legislation? How much investment in data management is needed?

- **Insurers** – Should the cost of insurance be built into the purchase price of a vehicle, or included as an ongoing telecom cost? This is a key issue facing the insurance industry. Another is the communication breakdown between insurers and OEMs. Currently, the lack of a common language and common goals is holding back development in this area.

- **OEMs** – Instead of rigorously controlling their customer relationships, OEMs need to open their gates. The pace with which telematics grows from now on depends, to a great degree, on the extent to which OEMs are willing to cede control of customer data and allow third-party developers into their infrastructures. Successful partnerships will enable OEMs to develop the key competencies needed to satisfy an increasingly sophisticated customer base.
“Automakers are into an indirect sales structure right through the dealership. And a lot of players are out there in a position to bypass that problem and owning the customers themselves.”

“If you think of the world where cars don’t crash which is inevitably going to happen, it is just a question of how long is it going to take, that has huge implications because essentially motor insurance as we know it today won’t exist.”

“Yes, there could be winners and losers, but if you want connectivity to be really beneficial to you there should be some ground you should be willing to give.”

We brought the telematics value chain together at one table for an intensive discussion on topics currently shaping the sector.

What are the telematics end services?

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<tr>
<th>Vehicle independent services</th>
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<td>Other services*</td>
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How are telematics services delivered?

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<th>User interface</th>
<th>Wireless network (connectivity)</th>
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Creating the win-win ecosystem

Stakeholders in the telematics ecosystem are still evolving strategies to secure access to, and ownership of, the end-customer. In the drive to build critical mass in the marketplace, a new mindset is needed with the various stakeholders coming together to form effective partnerships.

Participants agreed that the multiple players involved in telematics must forge strategic partnerships to develop offerings that will build critical mass, refine the understanding of end-customer requirements and, ultimately, drive the industry forward.

This may mean relinquishing, or at least rethinking, the entire concept of “customer ownership” — a particular challenge for OEMs. With protective business models engrained in their cultures, these organizations remain, in large part, unwilling to share their customer data. Nowhere is this more evident than in their relationships with insurers.

For the future, a number of priorities were identified:

• **Remember the car is a product.** Viewing the car as a portal is a mistake. It is a product for OEMs and a means of transportation for consumers. Whatever telematics services are developed, they must make sense in the context of getting from point A to B.

• **OEMs need to open their gates.** Instead of seeking to control their ownership of customers, OEMs need to expose more of their vehicles’ infrastructures to other service providers. This may mean moving toward new business models based on revenue sharing in an API-style open platform environment — although with fewer, more relevant vehicle-related applications.

• **Collaborate or regulate?** Stakeholders in the telematics market agree on the need for collaboration. But the need for regulation and standards is open to debate. If introduced, would broad-based market standards help to build a more robust ecosystem, or would they stifle innovation?

The pace with which telematics grows from now on depends, in large part, on the extent to which OEMs are willing to cede control of connectivity and allow third-party developers into their infrastructures.
“Carmakers are afraid of losing the battle around ‘customer ownership.’ They’re focused on keeping control, mainly because they haven’t worked out how to answer this question yet.”

“App stores are a real buzzword in our industry. Well, they’re no good if you’ve only got ten cars on the road using them. You need to get critical mass. By opening up to a wider market, the chance of success is much greater.”

“The winning ecosystem will have three parts – effective and efficient partnerships, meaningful customer-centric outcomes and, third, a reasonable amount of profitability for all the players involved.”
3.1 What does “winning” look like?

Connectivity will transform the mobility and transportation experience, redefining how vehicles interact with their owners, with each other and with the cities around them. Greater collaboration between stakeholders is the catalyst that will make this happen. As they reassess their roles, all players need to identify what “winning” in this new market looks like for them.

Each stakeholder has its own perception of what “winning” looks like. For OEMs, just one example that was discussed, it is still all about owning the customer relationship, and the data that flows from that. This has implications for players throughout the value chain.

The priority must be to foster relationships based on mutual benefit. For insurers, for example, this might mean undertaking to channel repairs back to OEMs’ workshops, in exchange for the customer data needed to improve pricing and claims processing.

What does “winning” look like for car owners? Stakeholders need to improve their understanding of what customers want. Still overlooked, a high priority is to explain to customers how connectivity will actually enhance their mobility and/or driving experience, as well as their ability to obtain a particular service for the vehicle.

“We spend a lot of time trying to create the business case for OEMs – if they don’t understand that they need to connect the car, then it doesn’t happen.”

“If insurers can use user data supplied by OEMs to drive down the time taken to manage claims, that’s a huge cost benefit for them.”

“The way the OEMs structure their P&Ls creates a challenge. It’s all about making a small profit today. They don’t count potential revenue-sharing five years down the road – that’s what we need to get them focused on.”

“You have to convince OEMs about the value of putting a certain amount of infrastructure in and outside the vehicle. Winning propositions will be based on business models that can make planning and development, sales and marketing, and aftermarket teams happy about the solution proposal.”
3.2 The customer imperative

Consumers want flexibility, not complexity. They want connectivity, but not at a very high cost. Much of the potential for telematics remains unrealized because customers are unsure if the benefits justify the costs – especially with so much duplication in product offerings.

With telematics technologies developing so rapidly, the costs of embedding and updating in-car connectivity are rising all the time. Existing pricing models will soon be unsustainable. And consumers remain extremely price-sensitive where these services are concerned.

So what is a winning customer proposition? Participants pointed to the urgent need for deeper customer insight. OEMs might understand the motivating factors for car purchases, but what about the services customers actually want to have embedded in their vehicles?

Crucially, consumers want freedom of choice. If applications are provided within the purchase price of a vehicle, consumers want the ability to opt out. They also want relevance. Services should be developed in the context of the wider driving experience. Looking ahead, the development of packaged solutions that correspond with consumer demand will force all players in this industry to work outside their core competency.

“If you look at other vertical markets, the guys who win are the guys who understand more about their customers than the next guy.”

“You can begin to build services that work from an economic perspective and then you just have to execute more rapidly, with agile tools, that enable you to keep up with changing preferences.”

“Whatever services are developed for the in-car experience, they must be within the context of getting me from A to B. I don’t go and sit in the car to listen to Spotify in the evening.”

“I don’t think there’s enough thought around the economics of these services – the costs of developing and distributing them. Fundamentals for success must be about to make it simple for the consumer to do things that they value, Then they are much more likely to pay.”
3.3 Building a winning ecosystem

As well as an attractive and flexible customer proposition, tomorrow’s winning telematics ecosystem will be built on effective and efficient partnerships between stakeholders. Otherwise, the way will be left open for disruptive new entrants to seize control of the market.

For seamless collaboration to become a reality, “win-win” propositions between the parties involved will be essential. One supplier participant summed up: “It’s all about developing a business model to show how you can increase revenues and decrease the costs of launching services. If we can do that, we’ve got a great opportunity to build a new ecosystem linking the various providers – some coming in at the start, some at a later stage, but all of them building on this proposition.”

Open integration will also be critical, most participants believed. As a telematics equipment provider put it: “It’s about getting the infrastructure, making the OEMs connect, ensuring we have systems and platforms that integrate and are open so we can all contribute by creating new services.”

Integration is vital too at an organizational level. Telematics developments remain siloed activities. Objectives for product planning, long-term strategy, sales and marketing and the aftermarket should all be aligned. And partnerships with other businesses across telematics need to be closely managed and carefully structured so they remain sustainable.

“A strong public client will be an important element in a win-win ecosystem, helping to reduce costs and provide some ‘agnostic’ structure around which to build out the market.”

“What really matters is how all of these businesses are going to interact so that their business models can actually evolve to the future state.”

“We must rally the masses to understand this as a business opportunity; win-win really means that I earn money, you earn money, we grow market shares and everyone has a piece of the cake.”

“Who’s going to pay for the module, the connectivity, the data you have to transfer on a constant basis? That’s the barrier today. How does it scale on the mass market and who’s going to pay the bill for the bits and bytes you need to send over the air to make this happen?”
3.4 Defusing friction

Connectivity is the future. And collaboration will make it happen. But the journey is littered with complex challenges – not least of which will be defusing friction between the stakeholders concerned.

Inevitably, much of the focus for this friction continues to be on OEMs. Although they are integral to the rollout of telematics, their business models can create frustration for other market participants. As one insurer said: “The inability of OEMs to understand insurance is quite staggering. So, in the medium term, we’re simply sticking our box in the vehicle and connecting straight to it. Now we’ve got our own customer relationships that we can talk to 24/7.”

A telematics services provider put it like this: “Many of the conversations I’ve had with OEMs have been about their almost visceral need to feel they own everything – the data, the customer and the overall telematics strategy.”

Clearly this is a significant issue and communication within the ecosystem must be improved. Priorities include ensuring OEMs better understand how telematics can enable new ways of interacting with customers and expanding the brand experience.

“OEMs don’t have the internal structure to process the telematics function. They’re not clear who should own it, so they put it in the financial division. And because that means the financial division gets distorted, they ship it back to corporate.”

“We need something similar in automotive where a weak OEM says, you know, that’s fine, I’ll turn over the infotainment, the customer experience in my vehicle to somebody who understands consumer electronics better than I do.”

“What do insurance companies do? They create their own end-to-end products – either to compete with OEMs or simply because OEMs are not connected to the critical mass that’s needed.”

“The key shift we need is from this medieval ‘I have to own everything’ to a mindset for the digital age, which is ‘How can I collaborate with people to create real enterprise value?”
3.5 A question of standards

A greater degree of standardization would benefit the telematics ecosystem. But should standards be imposed on the industry? Or will they evolve as a natural consequence of increased collaboration?

Standardization will support growth in the telematics ecosystem. But how can this be achieved? Participants shared concerns that too many formal standards could have a negative impact, as one telematics provider put it: “Standardization is great at one level. Everyone can start talking the same language. But the flipside is that no new innovation is going to occur; we are going to start slowing ourselves down. To me, collaboration seems to be the way forward.”

Will collaboration foster a more standardized approach, or vice versa? Many participants predicted the emergence of de facto standards (akin to interoperability in mobile money, or interconnectivity in telecoms). But they agreed that the pace of change in telematics means that these standards will need to be in constant flux. More realistic, and probably more helpful, will be the arrival of standard data structures and information sets (for maps and geolocations, for example).

“When you are designing a solution for an OEM, you have to think about the long product lifecycle and how the standards currently in place will change during that lifecycle. Any solution you develop must have the flexibility to adapt.”

“What used to be a very good standard for a certain solution will not be the same for the next generation or the next market requirement. Change will be constant, so we have to work together. I don’t see any single player being able to provide everything that’s needed.”

“Legislation is a big question. Will they find the right legal environment, or will it be impossible to implement because everybody is afraid to take liability?”

“Is collaboration the way forward to create an ecosystem, or do you need much broader standards that are acceptable across parts of the ecosystem?”
Wherever they sit in the telematics ecosystem, all stakeholders must overcome a common challenge: developing business models and approaches that will enable them to realize the enterprise value of these technologies.

We heard about a range of approaches from our roundtable participants for realizing and recovering the investments that have been made in telematics. One key question was the proportion of ROI that should be generated from the customer: should customers be charged up front, or is it preferable to build models where returns are generated across a vehicle’s ownership?

Various opportunities exist for the principal stakeholders. Some OEMs are building the cost of diagnostics and security services into the price of new cars, with subscription models being used for the aftermarket. Payment services can be integrated within vehicles, and non-core services (billing and subscription management, for example) can be outsourced to partner organizations, such as carriers.

Investments in a number of areas are critical to realizing telematics ROI. Amongst the highest priority is big data. Although the upsurge in vehicle and customer information creates huge opportunities, many organizations still struggle to identify the value of the data they own (i.e., the data that customers will find useful).

The measurement of success in the telematics market poses significant challenges. Few stakeholders are equipped with the revenue and cost metrics needed to quantify benefits and build a business case for further investment to their boards (who are often skeptical about telematics). As one participant said: “The danger with telematics is that it is a great technology looking for a market. The winners will be the ones that can connect the big idea with the right methodology and a well thought-through business case.”
“We have got the data, and all of us agree it is extremely valuable. So why aren’t people buying it?”

“It seems to me that there is still a perception gap around data. We are all saying it’s really valuable, yet there is nobody running out the door to buy data just yet.”

“There is real return on investment if organizations can come together within the ecosystem and understand what value these relationships can deliver. But it’s difficult and time-consuming to build these relationships. You have to put yourself out there, and decide how much you’re willing to risk.”

“Telematics is entirely embedded into the whole claims process – from the first notification of loss to fraud detection and throughout the whole chain of claims management. That’s one of the real benefits which drives down costs and allows us to charge a cheaper premium.”
When and how should customers pay for telematics services? It’s a contentious issue that will put increasing pressure on the relationships between OEMs and dealerships. As one participant put it: “Until now, OEMs have focused on delivering the product and the services connected to the product – and not on consumers. But now some companies are figuring out how to connect and create telematics services that are linked to the consumer and not the vehicle. It’s a difficult journey for them to take, because it means building connections with their end-customers – and overtaking the relationships that dealerships currently own.”

Telematics provides dealerships with an exemplary opportunity to understand their customers better and interact with them on an ongoing basis. But they lack experience and expertise in describing and selling telematics. As part of the collaborative process that must get underway, some of our participants felt that OEMs should focus on developing stronger links with dealers, providing them with a better understanding of the benefits of these technologies for their customers, and their own businesses.
Big data, IT, operations, R&D... where should stakeholders be targeting investments to maximize ROI from telematics? Participants agreed that big data capabilities are essential. However, while the upsurge in vehicle and customer data generated by telematics is a huge source of opportunity, its management poses a major challenge.

Sophisticated data management and analytics capabilities will be essential. And various issues must be confronted as organizations drive toward acquiring these competencies. Who owns the data? Where is it located? Which data is valuable? How should it be managed? What data security and privacy issues must be addressed?

Telematics is evolving rapidly and stakeholders are struggling to put in place investment strategies that can anticipate market developments over the medium-term. Summing up, participants agreed that the development of cogent business cases should be a priority – to provide clarity on the size of investment required, and justify the resources needed to achieve targeted ROI.

To realize the enterprise value of telematics, stakeholders need to be willing to invest for the future. But with the sector developing so rapidly, which should be the priority areas?

“Technology is the enabler for all this. You need to focus on changing internal processes ... from static to dynamic services. The big investment needs to be in that area if you’re going to develop a new service that someone is willing to buy.”

“It’s really a question of timing, about whether the investment capital is coming through past profits that have been generated from customers, or whether it’s forward-looking.”

“Somebody has got to make an investment [in big data telematics capabilities], stick their neck out and try and make this work. But who is going to do that? Right now there’s still a perception gap around data – we’re all saying it’s really valuable, but nobody is rushing to buy data just yet.”
The measurement of success in the telematics market poses significant challenges. Few stakeholders are equipped with the revenue and cost metrics they need to quantify benefits and build a business case for further investment.

The development of meaningful revenue and cost metrics will provide stakeholders with a vital foundation on which to build their business cases for further investment and demonstrate ROI.

But few organizations have been successful in doing so, largely because it has proved difficult to quantify the value of telematics (and the data it generates). As one participant said: “It’s interesting to compare telematics with other sectors – mobile advertising, for example. Mobile accounts make up 25% of media viewing time, but only about 6 or 7% of overall budget. That probably comes back to the whole metrics issue. It’s very difficult to apportion value to a mobile advert. So it’s a problem that’s common to other industry sectors.”

Another participant provided a ‘real world’ example of what can be achieved: “This company invested in quantifying the benefit of telematics to three big truck fleets. They started harvesting information on how trucks were used, mileage and journeys. They took that information and used it to go back to fleet managers and drivers and help them to drive revenue. After around nine months they had increased sales of spare parts by 5% and utilization in the workshops by 20%.”

“There are efficiencies that you need to be able to drive within your own processes to justify the infrastructure that must be put in place to deliver connectivity. And you have to be able to measure these efficiencies.”

“We know OEMs are getting benefits from telematics. But how can they track that internally and demonstrate that this actually is something that has a return on investment?”

“This is not about creating an app store with 1,000 apps. It’s about much more tangible services that we can go to market with tomorrow – and where the impact on efficiency or profit margins can be quantified.”
4.4 Bottlenecks to realizing ROI

Stakeholders must address a number of bottlenecks before they can realize the enterprise value of telematics – from technology and confusion over data ownership to clarifying their role in the new collaborative ecosystem.

Some of these bottlenecks are industry-specific, some are common to all players. For insurers, a key area of focus will be to understand how to use the technology to drive down the cost of claims, as well as how to use big data to identify customers that drive more sensibly than others. Sophisticated new IT capabilities are needed. Systems must be equipped to communicate with customers 24/7. Without that resiliency throughout the service infrastructure, lack of connectivity will cause a multitude of service problems.

For OEMs, aside from the question of data ownership, a lack of effective communication with end-customers continues to hold back progress. One OEM participant summed this up: “It’s not just about the technology. There’s a lot behind the scenes that you have to do and think about. You have to explain why this telematics product is different. Make sure the customers understand what they’re buying. Make sure they understand that they have to give up privacy and data protection.”

At a more fundamental level, participants agreed that the whole telematics business model – and the change of mindset it requires – is a bottleneck common to all stakeholders. One insurer explained: “Basically, it’s a difficult model. Everything is more, everything is new, everything is difficult. New skills are needed. If you have claims people with years of conventional experience, you have to teach them how to use this new technology. The people management is quite a challenge.”

“You have to have a service infrastructure to deal with customers 24/7. When you have complaints, the regulator starts getting interested. So you have to have more compliance, you have to have bigger service areas. Basically, you have got to have more IT.”

“We had a critical mass for our launch in the US, but in Europe a lot of the car manufacturers wanted to keep the data for themselves. They were unclear about its value and afraid that if they shared it, that could undermine their lead as innovators.”

“Why do we have this disconnect between everybody saying that data is really important and yet nobody is actually going out and buying it?”
Stakeholders are being asked some tough questions across a range of areas – from packaging customer data, to revenue models and urban mobility connectivity.

In a series of breakout sessions, we focused on some of the big questions confronting stakeholders across the telematics ecosystem.
The data privacy regulations likely to be introduced in Europe in 2015 mean that the packaging and usage of customer data will pose a considerable challenge to stakeholders. Customers will need to provide explicit consent before giving away their data, as well as being able to request access to all the data that is being held on them. Companies that cannot provide that information within a reasonable amount of time could face penalties of up to 2% of total revenues.

5.1 Packaging customer data

“There are a lot of privacy problems. But this is a business model that works on the internet where companies are tracking all our attitudes and habits. Some companies want to do the same with our mobility patterns. I don’t see a difference.”

“We can help you buy tickets for the tram or subway, pre-pay your gas, make it easier for you to travel from A to B. To get that going, we need data on how and where you’re travelling. Then we can mobilize the insights that are in that data and sell it to other service providers.”

“Provided we address the privacy concerns, we’ll be able to pull in pieces of data and use the information to create value and better services for end-users, as well as taking data on traffic patterns and making it available to the government.”

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**Considerations for Packing Customer Data**

- Who is providing data?
- What are the data sets?
- Who owns data?
- Does control data access?
- Some uses of data:
  - What questions are we trying to answer
  - What data answers these questions
  - Who owns access to what data to enable desired business outcome?
  - How do “approved” data consumers get access to the data?

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- Mobility apps & combining data from multi-model travellog
5.2 Urban mobility connectivity

We know that connectivity and car-web integration provide possibilities for redesigning how vehicles interact with cities. In this way, they have the ability to transform urban mobility through smart city projects, such as the one currently being piloted in Singapore.

Telematics is the catalyst for making this happen. By facilitating car-sharing arrangements that combine private, family and corporate needs, it will play a key role in reducing congestion. It can optimize parking availability, drive road safety improvements and, when combined with batteries as a power source, open up multiple vehicle-to-grid benefits.

“It’s this idea that you need to bring together the public and private sectors, and a whole lot of people you never thought you needed, to actually do this and see what happens.”

“Look at what governments and councils are trying to do at the moment. By 2015, there are going to be self-driving pods in Milton Keynes that will take people from place to place. Out in Sydney this year a distribution company has been set up using drones to deliver parcels across the city. That’s a real company using telematics data, real-time information, connected devices to provide a new service.”
All stakeholders need to rethink the revenue models that they apply to telematics. With greater collaboration set to transform the market, more flexible models based around revenue-sharing arrangements will need to be developed.

A number of participants from the insurance sector pointed to the challenges this creates for their own industry. As one put it: “Utilizing telematics technology adds about 8% of cost to premiums, over and above a conventional motor policy. So in the UK, probably one of the most competitive markets in the world where motor insurance is concerned, insurers need to make sense of a technology that’s going to add even more to the cost of premiums.”

“We need to establish who stands where in the value chain and then start to focus on what value each stakeholder adds, and how added value should be defined. That’s when you can understand revenue possibilities – and how these should be shared.”

“I can’t wait for these motor manufacturers to decide what they are going to do, whether they put B2C or B2B as a priority. We are just going to get on with it. When they are ready I can just hook into it. That’s the plan.”

“No one is just going to give you the right to have data about their personal travelling arrangements without you giving them a sizeable benefit. And I would say that the reduction in premium cost has to be of the order of 15% at least.”

“It’s shifting away from talking about the capabilities, the connectivity, the modularity of your solutions to talking about what incremental revenue benefits you may have or how you share those revenues.”
5.4 The insurance cost conundrum

Should the cost of insurance be built into the purchase price, or included as a telecom cost? While participants from the insurance sector had various ideas on the best model for driving uptake, they all agreed on the risk from disruptive innovators. As one insurer said: “We’ve all got our mobile phones with map applications. Say the provider introduces a button that can assess my driving. And it just works in the background with an auto-start capability, recognizing your driving footprint and capturing how you drive. And then the provider sends a personalized message saying, ‘do you want a quote for your insurance?’ So then they take that driving data and put it up on their aggregator site, and do a reverse auction amongst a panel of insurers.”

“Most OEMs have a manufacturing division and a financial services division. Insurance companies report to the financial services division so they don’t really get involved with the manufacturing part of the process. They lack the expertise to talk about how an insurance product can be embedded in the vehicle. And that’s key part to the overall process.”

“For the insurer, it’s all about cost and managing cost. Telematics and connectivity information has two main benefits – namely it provides the data that allows you to predict when a claim is going to happen, and the data that allows you to manage the claim when it does happen.”

“We’re moving away from an aggregator-type model, where the customer has to make the effort to put in all of data, to a much more push-based model where all this data is automatically leveraged based on connectivity. Now service providers can take that data and bid for the customer. You’re taking the cost of an intermediary out of the equation altogether.”
## Considerations for stakeholders

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<th>Telecom operators</th>
<th>Motor insurers</th>
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<tr>
<td>• Integrate telematics offering with mobility solutions to support intelligent transportation solutions</td>
<td>• Offer 4G/LTE connectivity with high bandwidth services, such as internet gaming, videoconferencing, etc. for passengers</td>
<td>• Develop an internal IT system to leverage telematics-based insurance data</td>
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<td>• Build the cost of diagnostics and security services into the price of the new car, while subscription model to be followed in aftermarket</td>
<td>• Provide flexible data plans, such as shared data plans or split billing services</td>
<td>• Create attractive aftermarket proposition to drive uptake in car population on the road</td>
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<tr>
<td>• Focus on vehicle data, as well as integration of data in the environment</td>
<td>• Focus on network security for vehicle-related data</td>
<td>• Offer specialized products for fleets aimed at reducing the total cost of ownership</td>
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<td>• Leverage other revenue streams, such as location-based advertisements</td>
<td>• Telematics service platform to offer end services either directly to the customers or in collaboration with carmakers</td>
<td>• Collaborate with carmakers to offer UBI based on integrated connectivity solution</td>
</tr>
<tr>
<td>• Integrate payment services within the vehicle (while ensuring data security)</td>
<td>• Leverage data collection and mining capabilities to support carmakers</td>
<td>• Partner with carmakers to offer customer support services, such as subscription management and charging and billing services</td>
</tr>
<tr>
<td>• Build telematics systems with enough capacity and performance to handle software upgrades</td>
<td>• Partner with carmakers to offer customer support services, such as subscription management and charging and billing services</td>
<td>• Partner with various sector stakeholders to launch services in the aftermarket</td>
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<th>Collaboration and partnerships</th>
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<tr>
<td>• Partner with automotive suppliers to build open and scalable technology (HMI)</td>
<td>• Partner with carmakers to offer customer support services, such as subscription management and charging and billing services</td>
<td>• Collaborate with carmakers to offer UBI based on integrated connectivity solution</td>
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<tr>
<td>• Collaborate with aftermarket channels for optimal utilization of vehicle data</td>
<td>• Partner with various sector stakeholders to launch services in the aftermarket</td>
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<tr>
<td>• Outsource non-core services, such as billing and subscription management</td>
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</table>
Telematics has a very complex value chain, which involves players from various sectors. EY helps major stakeholders throughout this ecosystem to develop and sustain the innovative business models that are needed going forward.

Our services include the following:

- Business process innovation and transformation (connected car, fleet management, car sharing)
- Blueprints for selection of suppliers to implement connected car-IT infrastructures, quality assurance after implementation
- Transformation integrator, design of operating model, architectural design, IT risk and security management, transformation facilitation
- Business diversification strategy and risk assessment, market strategy for new products and services, research for uncatered product segments
- Identification and assessment of potential investment opportunities and risks associated with new markets
- Cross-border corporate income tax advisory and income tax compliance
- Tax incentives for investments in car-sharing across geographies
- Legal and regulatory risk analysis and compliance, including data security

To discuss EY’s capabilities in the telematics and connectivity ecosystem or to find out about similar upcoming events, please contact our sector professionals for more in-depth information.
EY contacts

**Global Automotive Center**

**Michael Hanley**
Global Automotive Leader  
+1 313 628 8260  
michael.hanley02@ey.com

**Jean-François Tremblay**
Advanced Mobility  
Segment Leader  
+1 514 874 4453  
jean-francois.tremblay@ca.ey.com

**Jeff Henning**
Global Automotive Markets Leader  
+1 313 628 8270  
jeff.henning@ey.com

**Dr. Rainer Scholz**
Mobility Innovation Group Leader, 
Advisory Services  
+49 40 36132 17056  
rainer.scholz@de.ey.com

**Anil Valsan**
Lead Automotive Analyst  
+44 20 7951 6879  
avalsan@uk.ey.com

**Regan Grant**
Global Automotive  
Marketing Manager  
+1 313 628 8974  
regan.grant@ey.com

**Global Telecoms Center**

**Jonathan Dharmapalan**
Global Telecommunications Leader  
+1 415 894 8787  
jonathan.dharmapalan@ey.com

**Holger Forst**
Global Telecommunications Assurance Leader  
+49 221 2779 20171  
holger.forst@de.ey.com

**Staffan Ekström**
Global Telecommunications TAS Leader  
+46 8 5205 9390  
staffan.ekstrom@se.ey.com

**Amit Sachdeva**
Global Telecommunications Advisory Leader  
+91 124 671 4870  
amit.sachdeva@in.ey.com
Global Insurance Center

Simon Burtwell
UK Head of General Insurance
+44 20 7951 0532
sburtwell@uk.ey.com

Michael Barkham
European Actuarial Practice Leader
+44 20 7951 1516
mbarkham@uk.ey.com

Catherine Barton
European Actuarial Retail Insurance Leader
+44 20 7951 5503
cbarton@uk.ey.com

Sherdin Omar
Senior Manager
European Actuarial Services
+44 20 7951 7840
somar@uk.ey.com

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