Bird & Bird

Big Data and the automotive industry

Roberto Camilli & Alexander Duisberg

ROBERTO: Big data is a general term to describe the fact that there is a lot of data produced every day, and this data must be managed, must be controlled, analysed and used.

ALEXANDER: Big data is becoming the key asset for the whole production and manufacturing cycle, as well as obviously the provision of services in the automotive and mobility space. Big data is actually at heart of how the extraction of sensor data and location data will be combined in order to provide services, in order to allow car manufacturers, providers of telematic services, allowing insurers, leasing car companies to actually predict movement of cars, demand and create a whole eco system around the usage of that data.

ROBERTO: Connected driving means the car is connected to the internet and is connected to a number of services, which will help driving the car, will help convey information while moving around cities and infrastructures, convey information on traffic, convey information on wider and broad conditions, parking availability, paying of tolls, for example. If you have a problem you can already connect to the shop service and book the repair that your car tells you that you need, and even pay for that on the go. So the car is your connection to the rest of the world while it's moving and while it's working.

Data related to systems and components, parts that are working are, of course, very important for maintenance purposes, warranty purposes as well. If you know that something is breaking in advance before it happens you can avoid an accident, avoid stopping the car, breaking the part. You can intervene on time. You can even plan your logistic of your warranty and maintenance parts in advance, because you know exactly what parts are going to be needed and where.

A car can connect and is already connected to our smartphones, but it can improve on that and be an assistant, because the car knows where you are, it knows if there is a delay, if there is a road jam it can communicate that automatically to your next appointment, for example, and postpone it and move it. You will need to receive and you will receive messages, emails, information, communication. This must be relayed to you in a safe way.

ALEXANDER: If you're looking to logistics and production we anticipate that the usage of sensor data in the production cycle will become much more efficient by using data in real time and flowing it directly in to the production cycles. Car manufacturers have already developed a very high degree of sophistication in just in time delivery models, but we think that with big data analytics this will become even more efficient and much more closer time to market than it is already now.

It is truly the key question who owns the data, and we clearly can see that there is no unique proprietary concept of ownership and data as such. In the eco system of the automobile industry with the manufacturers, the service providers, the insurers, the leasing car companies, the holders of the

individual vehicles, the usage of sensor data and location data may be driven by different and divergent interests. So car manufacturers who implement sensors might be thinking that they're entitled to have that data and transact with that data because they are the original source of producing that data. Equally, your could think about service providers are actually using that data as the first one to use that data, and they might be saying well, this is actually data we process and we develop and, actually, we have certain proprietary rights in it and we want to describe a certain form of ownership or at least ability to transact on that data, and the big question is then do they need to ask someone for permission, yes or no. And that replicates in to the insurance industry, that replicates in to leasing car operators, so you can see there is a big, big space, open space, which requires some careful legal thinking. It is a real challenge for lawyers to think about how can you define, how can you describe a certain attachment to certain types of data.

ROBERTO: Liability is another big issue, of course. If you have an automatic system, a car that is driving itself, that's the goal, but then brings a lot of new players in the liability chain, there is a driver, there is an OEM manufacturer, manufacturer of the car, so you have hardware suppliers, software suppliers, app developers, all these chain of players could become liable if something was wrong.

The next big thing would very likely be additive manufacturing, 3D printing which will revolutionise any industry, any manufacturing industry for sure, if applied to the car manufacturing it will completely change the supply chain. The suppliers will be raw material suppliers and they would basically print their parts wherever they need to be, their components, their systems. So it's a revolution that completely changes the game again.

ROBERTO:
This is happening now, and I think one of the best indicators why this is happening is if you look at where the car manufacturers are actually pooling their talent and what they're laying focus on. This is a great part of the Silicon Valley, this is software engineering, this is massive. If you go to those regions you will find out that the future is being invented there, we're just scratching the surface, and we'll see this grow so massively over the next few years. It's just amazing.

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This document is a transcript of an edited video recorded in October 2013.