NEWSLETTER NO. 1

ARTIFICIAL INTELLIGENCE AND AUTOMOTIVE

Artificial Intelligence: introduction.

We like to think of ourselves as more than mere legal operators.

We are fascinated by the creative effort put by jurists in reading new realities according to rules able to reconstruct and govern the complexity of relationships.

In this respect, nowadays one of the most important issues globally is Artificial Intelligence ("*AI*").

Therefore, we have thought of a path, which will be developed through a series of brief reflections organized in the form of newsletters, aimed at illustrating the main legal aspects of AI.

But to begin with: what is AI, ultimately?

Still today, the question lacks a generally approved definition.

After all, several institutions throughout the world continue to grapple with the innumerable implications deriving from the increasing role of AI (USA – Harvard's Kennedy School of Government, Japan – Japanese Society for Artificial Intelligence, the European Parliament and also the Italian Ministero dello Sviluppo Economico).

According to Jerry Kaplan, one of the world's foremost AI experts, the essence of AI is not different from the essence of human intelligence it comes from, and consists of the ability to take appropriate generalizations in a timely manner and on a basis of limited data.

In other words, AI is the ability of an artificial apparatus to make choices, adopt a behavior following analysis and processing of a data set.

We believe we can disregard a theoretical definition, convinced as we are that AI is the fruit of common feeling in a given historical moment, and that it is substantiated by the practical applications in which it is expressed.

In fact, frontiers of AI potentially extend in every sector of activity, so much so that AI itself is generally divided into numerous sub-sectors dealing with specific practical problems and requiring different tools and capabilities.

The purpose of the newsletter we present is to illustrate the legal issues related to the AI theme to the study, with particular regard to the automotive field.

Let's start.

<u>Artificial Intelligence and automotive industry: the state of the art</u>.

While AI refers to the ability of a technological system to solve specific problems or perform specifically defined tasks and activities typical of human mind or human ability, applied to the information technology sector it essentially identifies with the discipline that deals with creating machines (hardware and software) able to "act" autonomously on the basis of pre-set algorithms.

As we said, AI is interesting for various commercial sectors, from manufacturing to finance, from healthcare to digital marketing, but it is becoming a protagonist especially in the **production of motor vehicles**.

The use of AI in the automotive industry appears in numerous "abilities" of cars, from their interconnection to the Internet and between each other, to the ability to self-diagnose any mechanical and/or electronic malfunctions, up to the so-called autonomous driving.

As the applications of AI to the automotive industry are many (and, possibly, innumerable), it may be worth focusing on the one application expecting to have the highest impact on automakers, drivers and service providers: <u>AI applied to driving</u>.
It is already before our very eyes that AI will be key on the way people will drive (or will be driven by) their cars in the nearest future.

This application of AI can be distinguished into two categories:
1. <u>AI assisting the driver</u>, which means AI will be used to empower the driver's senses (and, in some cases, to substitute them) in order to grant the best possible safety to the vehicle and its occupants. Some of these features already apply to many cars, such as sensors identifying dangerous situations, alerting the driver and/or taking emergency control of the vehicle in order to avoid accidents;
2. <u>AI driving the car instead or on behalf of the driver (i.e.: driverless cars)</u>, which means AI will drive autonomously the car without any involvement of the driver, or even without a person physically present into the car. Two companies are currently leaders worldwide in this sector: Google and Tesla.

The forecasts of the institute of research IHS Automotive confirm that AI is the future of

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the automotive world: according to reports, in 2020 there will be around 152 million internet-connected vehicles in the world, while in 2035 there will be around 21 million self-driving cars.

Simply put, we are facing the biggest change in the car industry since the invention of the car itself.

But all major changes come with difficulties and, in this case, many legal issues that have to be addressed and solved.

<div align="right">To be continued…</div>