AV explained:

Global society is addressing present issues and preparing for future challenges. Worldwide Governments are financing more and more technologies and thus find a solution for better and prosperous future (prospective). One of the technologies financed and developed is Autonomous Vehicle (Self-driving vehicles) were primary conceived to eliminate accidents due to human errors, as well as reduce public liabilities and insurance premium payments, court costs which are related to litigations and all-encompassing costs related deriving from car crashes. AV were also implemented for petrol management to reduce consumption as resources are become thinner, reduce carbon emission to address sustainably issue and safeguard environment, this is to name just few variables to a complex current equation, by a foreseen savings forecast of 1.9 trillion US by 2025 which reflects the current speeding if even more.

Implementation purpose:

Even if accidents will decrease as the AV will have a spectrum of 360° for avoiding possible collisions with pedestrians and other users, accidents will still happen due to general faulty systems or due to declined AV’s tech or failure to system’s upgrade or possibly user negligence on fixing faulty systems; the User will be accountable for any unforeseen crash’s occurrence however the liability will slit also with the manufacturer if specific building faults are found.

Current implementation:

At this moment in time we’re at the 5th stage of UX process as the AV are being tested.

As every product that will hit the future market it was established before the final release, to increase autonomation gradually for economical and industries' impact absorption as well as give the global public enough time for acceptance and accommodate new changes along with the relative analysis to establish the degree of accountability of the user and of the manufacturer. Hence was drafted a progressive release of automations, designed to be divided in five stages of progression; respectively reported below:

1. Driver only (i.e.: zero or little automation),
2. Driver assistance (some specific automation driver functions i.e.: automation breaks, automation accelerator),
3. Partial autonomy (combination of driving primary automation functions, i.e.: integrate radar to detect obstacles and ability to auto- steering by keeping the car inside the lane),
4. High autonomy (final prototype release with response of the automatic vehicle to any condition i.e.: road adherence during fast acceleration or weather elements)
5. Full autonomy (final market’s release, i.e.: vehicles are fully equipped with full automation functionality and are safe to drive)

Stage a. to c. will be used to establish accountability of the operator while stage d. to e. it can be establish the accountability of the manufacturer.

The Autonomous Vehicle are made possible for technologies as Radar, sensors, biometric such as voice recognition precise geolocation, better computing algorithm based on AI, clouds services and robotic.

Obviously, the major impact will be on road safety, just in the year 2015 the death toll worldwide was about 1,250,000 this death toll will decrease by 90% by 2025 saving 1,125,000 lives. Just in 2010 death toll was 1.25 million (<https://en.wikipedia.org/wiki/List_of_countries_by_traffic-related_death_rate>).

With introduction and employment of AV optimists forecasted a decrease in vehicle crash total costs by 90%. While the economic scenario differs from country to country for example for fuel/oil the savings forecast can vary by far depending on all implied cost on fuel agreements, transportation, price indexation and other variables.

The major impact on cost saving will be achieved by applying income mobility with a cost savings of about 50% or more. Thanks to this revival done by a movement of the economic “type” will have a new burst in the global market with more job opportunities in the Insurance field. Thus, this change will make redundant others employment opportunities at least in the transport field for example it would require less demand on mechanic jobs, personal injury lawyer, medic and para medic and traffic officer.