Direction de l'Information Service de Presse



COMMISSION DIPLOMATIQUE CONSULTATIVE INTERNATIONALE

What our future is up to ?

Welcome to the 4th industrial revolution

It was already mentioned that in 10 years...the majority of what we do now, car, travels, food, jobs, etc etc...will completely disappear.

In 1998 Kodak had 170,000 employees and sold 85% of photo paper around the world. In a few years their business model disappeared and they went bankrupt.

What happened to Kodak will happen to many companies in the ten following years and most of people don't see it coming.

In 1998 would you have thought that 3 years later you would no longer purchase photo paper? Digital cameras were invented in 1975. At first they had a 10,000 pixels resolution, they have now more than a million of pixels.

Like every new technologies they were deceiving for a long time, thus before they became significantly more superior and leaders in a few years.

The same phenomenon will happen with artificial intelligence, in the health sector, electric cars and autonomous, education, 3D printing, agriculture and the labour world. In the next 5 to 10 years, software will transform most of the existing traditional industries.

Uber is simply a software tool, even if they do not own any car; they became the biggest taxi company worldwide.

Airbnb is currently the biggest hotel chain worldwide even though they do not own any hotel.

Concerning the artificial intelligence: computers are better, in an exponential way, to understand the world.

This year, a computer has beaten the best Go player in the world, 10 years before the expected date.

In the United States, young lawyers can't find a job. This is because the Watson computer by IBM can give a legislative advice in a few seconds, for more or less complicated cases, with a 90% accuracy, compared with a 70% accuracy for human lawyers.

Si if you are doing law studies, give up now, your future is compromised.

In the future there will be 90% of fewer lawyers, only the specialised ones will survive. On the medical aspect, the Watson computer already helps to detect cancer, with a

fourfold more precision and success than human doctors.

Facebook already has a facial recognition software superior to humans.

In 2030 computers will become more intelligent than humans.

Cars without drivers: in 2018 people will have access to the first cars without drivers whose prototypes have been already shown to the public. You will only have to seat and say your destination out-loud.

No matter if you have been drinking or if you are under illegal drugs, you will not have to drive.

In 2020 the whole car industry will be shattered, and will have to rethink its products. You will no longer have to own a car. You will only have to call a car with your mobile phone; it will come to pick you up and will drive you to your destination. You will not have to park your car, you will only buy (also with your mobile phone) for the distance driven and you will be more productive during the travel. Using your phone, your computer, etc. (parking lot useless, insurance useless)

Our children may never have to pass a driving license and they may have to buy a car at all.

All of this will transform our cities because we will need 90-95% less cars.

We will be able to turn parking lots into parks. Currently, there is an car accident every 100,000 kilometres.

With the cars without driver, there will be a car accident every 10 millions kilometres. We will save 1 million lives every year. (Other problem linked to the demographic issue) Most of car manufacturers will go bankrupt. Garages, repairmen, coachbuilder...

Big traditional companies already seek for evolution, and build better electric cars. While, big giants: **Tesla, Apple, Google** have a revolutionary vision and build motorized computers.

Numerous Volkswagen and Audi engineers admit to be completely terrified by Tesla. Insurance companies will be stuck into the mud. Without accidents, insurances will be a 100 times less expensive if not useless.

Their business model based on insurance-car will progressively disappear. Housing will change. Because you can work while travelling, or simply at home, many will go away to live in a better environment.

Electric cars will be on the top sales by 2030. Cities will become less noisy, less polluted. Electricity will become incredibly clean and cheaper. For the last 30 years, solar production is developing exponentially. We barely start to see the impact. Last year, worldwide, there was more energy produced from a solar source than from fossil energy.

The price of solar energy will become so low than all the coal mines will cease to be exploited by 2025. Low cost energy also signifies abounding water at low cost. Now desalinization only needs 2kWh per cube metres.

If, in the majority of cases, water isn't scarce, it's clean water that is scarce! Imagine what will happen if everyone could have access to clean water for almost nothing.

Health sector: We must announce the price of the Tricorder X this year. http://www.xprize.org and http://tricorder.xprize.org

There are companies that will produce a medical instrument called Tricorder X that will be controlled with your phone, that will take a retina scan, analyse your breath and blood. It will analyse 54 biological markers and be able to identify all the diseases. This will be less expensive and therefore in a few years everyone will have access to cutting-edge medicine almost free.

3D printing: In 10 years, basic 3D printers' price went from 18,000\$ to 400\$. In a meantime they became a hundred times faster and more effective.

Therefore, all the shoe manufacturers have become to print shoes.

In all the airports replacement components are already printed in 3D.

The spatial station disposes of such a printer, that it supresses the need to have many replacement components on board, like before.

Soon, new smart phones will have the possibility to digitalise in 3D.

You will be able to digitalise your feet and print your perfect sized shoes at home. In China, they have already printed a 6 floor building in 3D.

See: https://www.youtube.com/watch?v=0ZkPzymScgY

In 2027, 10% of everything produced will be in made in 3D.

Labour world: During the next 20 years, 70-80% of the jobs will disappear.

There will be lots of new jobs, but this is not sure that there will be enough in such a little time.

Agricultural world: there will be an agricultural robot of 100\$ in the future. Farmers of the developing countries could handle their fields, thanks to computing, rather than working during the day.

(Hydroponics or hydroculture (or subsoil agriculture), from the Greek $\pi ovo\varsigma$ (ponos, « work » or « effort ») and $\delta\omega\rho$ (hudōr, « water »), is the culture of plants realized on a neutral and inert substratum (of sand-coloured type, pozzolana, balls of clay, rock wool etc.)

Veal meat produced in labs is already available, and will become less expansive than the natural one since 2018.

Currently 30% of all agricultural lands is used for livestock. Imagine if we did not need it anymore. Several new companies will soon put insect proteins on the market. They are richer with animal proteins. They will be labelled as an alternative source of proteins. (a few BIO shops are already displaying comestibles insects)

There is an app called "moodies" that already determines in which state of mind you're in.

Entering a shop, a camera will guess if you're in a "purchase mood" or not.

By 2020 there are apps that will determine with your facial expressions, if you are telling the truth.

Imagine the political debate where we demonstrate if we tell the truth or not.

<u>Lifespan</u>: Currently, the lifespan is increasing by 3 months per year. 4 years ago, lifespan was at 79 years old, nowadays it is at 80 years old.

In 2036, lifespan will increase of more than a year per year. Furthermore, we will be surely living more than one 100 years, in good health.

Education: the less expensive smart phones are already at 10\$ in Africa.

By 2020, 70% of all humans will have a smart phone. Which means that everyone will have the same access to a worldwide recognized education, medicine, and information.

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