

GUILLAUME PEPY

Chairman of SNCF's Executive Board and Chairman and CEO of SNCF Mobilités

Thank you very much for your invitation, distinguished guests and dear colleagues. Of course, as Thierry mentioned, it is a challenge for the speaker to divert you from your lunch discussion. I will do my best and of course, I will make it short and draw your attention to some issues on the mobility revolution.

The mobility revolution is a fascinating story, because just imagine a world where customers used paper timetables and paper tickets to travel, a world where people would have to arrive at the station early; does it sound like a century ago? It is just 10 years ago, no more. Today, everything about mobility is on our smartphones and everything we need to move around. Mobility leaders, like SNCF, have had to adapt very quickly to these changes and we must continue to innovate, to anticipate the expectations of tomorrow's customers.

Before exploring how, I want to say a few seconds on why. The diagnosis is as follows. You know that we are entering a brand-new era, with new needs, new technologies and new rules of the game. The only option we have is to create solutions, to address three game changes: the impact of climate change, of course; the urban population explosion; and the increasing scarcity of resources. Mobility is vital for all our cities, it is the lifeblood of our economy but it is also a big, big challenge for our environment. It represents no less than 20% of CO² emissions, after the energy and heating sector. The consequence of that, is that mobility companies must be proactive and act quickly to promote shared mobility. On average, shared mobility produces ten times fewer emissions than private cars. In France, for example, our commitment is to double the shared mobility market share from 15% today, to 30% in 2030. That is a huge, huge challenge.

The balance of power and value creation has shifted dramatically with banks and asset heavy industries giving way to the digital economy. Even newer players are coming fast and furiously, like Baidu, the Chinese Google, with a market cap of USD 250 billion and Ali Baba, which already has a turnover of USD 6.5 billion. These new players are huge. They are not afraid; they have talent and they are going to disrupt the status quo. In our business, Uber, as you know has no real assets and I can see my friend Sébastien Bazin of Accor, who I am sure will speak a little bit about Airbnb and I would just add to that, that Ali Baba, the most valuable retailer in the world, has absolutely no inventory. New habits, new rules, the habits of customers are changing mobility.

The younger generations are digital natives and show a radically different attitude to ownership. Usage has become the core value, not ownership. Take cars in France. The average age at which people buy a new car, is 57. Today, I am just the right age to buy a new car; my first new car at the age of 57. Second, the carmakers are getting the message loud and clear. The Executive Chairman of Ford Motors recently said, 'If you live in a city you don't need to own a car any more', coming from a Ford Motors executive. Peugeot in France is another example. Peugeot has made a strong turnaround and they are implementing a strategic shift to become a mobility service provider in the next decade. The new players are disrupting the mobility market in several ways. New technologies like Tesla; new business model, like BlaBlaCar in Europe, the leader in carpooling; by designing integrated door-to-door mobility solutions, which of course is what you get with Google Platform or City Map in Europe.

If we go a little bit further with the new technology, the mobility industry must adapt and learn to play by these new rules and take these new technologies as opportunities; of course, clean power and electric cars, but also electric buses and trucks; full connectivity; the internet of things, which is going to save a lot of money and increase reliability; and driverless vehicles. Take the example of driverless trains. The new generation of driverless trains will, of course,



bring cost savings and we will be able to run more trains on the same tracks. As an example of that, In France we are now designing a new train line called Eole, which is completely automated and will carry more than 500 000 passengers per day, with more than one train every 80 seconds during peak hours.

Now ladies and gentlemen, we know why, let us take a few minutes on how. We have several ways to address this opportunity. The first one is, of course, to think like a passenger; we must think like a passenger. Take the example of Melbourne, where we organise weekly meetings with customer focus groups so that we can better understand their lifestyles and how they use Yarra Trams, which we are proud to operate. We share their views with our Qatar Rail colleagues here, for the future Metro and Light Rail Service in Doha, to be opened before the Football World Cup. User experience is key and we need to be more and more, client-centric.

The second way is through training, training, training. We need to train people as a first-class team. Digital transformation has changed the ways we train staff. We use virtual reality to give staff experience, live maintenance and safety training scenarios with a lot of interactive games. Each time we have decided to operate a network, our priority is training the local staff and of course, full technology transfer. Our third conviction is about size. Size matters in global mobility challenges, because we need to combine train, light rail systems, Metros, carpooling, car sharing, parking and online platforms. We need to combine those skills to deliver individual mobility solutions.

The last way is about seeing global, but acting locally. There are probably for or five mobility champions in the world; Deutsche Bahn; SNCF; NTR; and some others. They develop complex, multimodal ecosystems with solutions that match local needs; driverless cars somewhere; car sharing somewhere; electric bays. It is up to us to imagine solutions in line with local needs. To finish this quick presentation, let us look at some of these solutions.

The first is to plan an integrated system. As I mentioned before, new mobility systems require hub, station platforms capable of switching modes efficiently and quickly. I should stress here today, that the Gulf countries have taken the first major steps by building the most modern Metros in the world, in an amazingly short time. It is a world record and bravo to Qatar Rail for that. In Doha, urban transport has to be ready to manage exceptional ridership flows and move the millions of football fans expected for the World Cup in 2022. The second solution is to use railway as a backbone. More than 50% of the world's population live in urban areas and by 2050, overall population growth will add another 2.5 billion. Of course, train is the backbone of this system because it brings cities closer together, from city centre to city centre. The fourth solution is about connective hubs. Modern stations are built to use urban space efficiently and to avoid unnecessary travel. They consume less energy, thanks to innovations like smart grids and they are completely connected to the soft modes that passengers need for their last mile to their destination. Just referring to the last mile, in Lyon, France's second largest city, there is a flagship experimental system, called Navya, automated, driverless, electric buses. It helps to connect the Metro, tramway and buses. A company in Qatar, called Group8 has invested in Navya and purchased a few machines to operate in the Port of Doha.

Just to finish and bring everything together with digital. I will not insist on that because every speaker has stressed the importance of website platforms in all kinds of service. We should give our customers a guarantee that we will connect all transport modes. Just to finish with another example, we can talk about the world of tomorrow. I am sure you have seen a picture of a Hyperloop vision. Hyperloop is a new transportation system invented in the United States and, of course, it is an electric, autonomous vehicle. We have invested in other companies in this innovation area and we believe that this technology will be able to carry containers in the biggest ports in the world, such as Long Beach or Dubai, and that will help to solve the congestion problems in those ports.



I just want to conclude by saying that here, in the Gulf, I would like to pay tribute to the incredible mobility revolution taking place now in this region. You here are true visionaries. Your country has vast supplies of petrol, but you are already making considerable investments in sustainable mobility networks. You are developing state of the art interconnected mobility systems designed to anticipate customer expectations. One again, there is a record here in Doha, where we are today. You are breaking a world record with no less than 21 tunnel boring machines working at the same time in Doha, compared to two being used in France for the Grand Paris Express.

Thank you again for listening and once again, thank you, *shukran jazilan*, and thank you everybody and bon appétit.