

## Xavier BROSETA: Digitalisation and the airlines world

### 1. Digitalization already has massive impacts on airlines:

Just to quote a few examples:

Machines play an increasingly important role in airports: it has been possible to print out a boarding pass or a luggage tag through a machine for quite some time now. You can self check-in and hand out your luggage at some airports. Control of passports can be automated. And boarding will soon be. You no longer need to print your boarding pass at all.

In the commercial domain, the web is a very important battlefield. Air France-KLM sells approximately one third of its turn over via its own websites. We also have to deal with online travel agencies and self-booking tools, which are becoming more and more popular in companies. We think that mobile apps will become a significant channel for sales. Low-cost carriers have used this possibility to reach a large number of customers to get rid of traditional sales channels (travel agencies, self-owned retail points) or of systems that were put in place by the industry (Amadeus).

Digitalization will produce a more individualized relationship with customers. It allows us to know more about each individual customer. It allows us to use this information more efficiently, as long as we can bring it to our front line people in such a way that it is useful to them. That is already partially done at Air France-KLM with what we call “iPads for chief pursers”. This tool allows the chief purser to know a handful of things about the customers he or she has to attend.

In the relationships with customers, social networks have a huge impact. People love to tell what happens to them when they fly. They used to tell their preferred stories whilst having dinners with friends. They now use social media. Anything going wrong with anyone can immediately be reported this way. We have to be very reactive in a cool and firm way...

Digital technologies are more and more used in planes and to fly planes. For example, pilots no longer use hard copies of maps or of all the dossiers they need to prepare their flights and fly you safely and efficiently.

Modern planes send data to maintenance teams. For the time being, such data is mainly used to prepare interventions and repairs if need be. This should change in the near future.

One could consider that digitalisation has already been quite extensive in the airlines world.

... At the same time, apparently no one in the industry is able to understand what happened to a Boeing 777, which is 65 meters long, 61 meters wide and weights at least 300 tons... The plane disappeared with 239 people on board.

### 2. What's next?

Productivity gains will further continue in some areas:

- Coordination: Coordination is a key activity for airlines, as you need to coordinate activities of more than one hundred people to have a plane departing on time (crew, caterers, cleaners,

people taking care of freight, ramp, people taking care of passengers for check-in and boarding). Several information systems also need to communicate. Coordination activities involve thousands of people in a very top down way. Will digitalisation create more efficient coordination tools in the sense that those tools would be more cooperative?

- Maintenance: Planes will transmit more and more data, allowing to predict potential failures and to prescribe maintenance, which should have a tremendous impact on maintenance engineering and probably on blue-collars jobs (as less work will be needed).
- “Internet of things” can also be a game changer in logistics.

Disruptions could also occur in at least two domains:

- Customers will be more and more demanding about their digital environment on board. What a connected plane would mean and how it would work is still hard to imagine for the time being.
- Will Internet giants enter the travel agency business? For the time being, you could see more disintermediation than intermediation. All airlines sell a vast part of their turnover directly on the Internet (and some the whole thing). Online travel agencies and dedicated sites have appeared but they are not as important as Booking.com for the hotel industry. Internet giants could be game changers all the same. They have trillions of customers and they know them well. They get organized to know the products of various airlines around the world. They could be tempted to connect customers and products.

For the time being, no major change is expected in the pilots world. Could planes be flown without pilots on board, at some point in the future? For now, people are thinking of (and trying) to fly planes with one single pilot on board.

No major change is expected either in the way we transport people – at least no such thing that would be an equivalent of car sharing.

### **3. What impact on HR?**

Productivity gains have been huge in certain domains (and close to 0 in others). It should be thoroughly checked, but one can imagine that productivity gains have been far higher than growth, resulting in employment loss and a decrease in the price paid by customers.

Why are productivity gains so high? The cost of human workers tends to be very high in the airline industry and with no clear relations with productivity – hence the temptation to use productivity gains when they come to catch up...

An important consequence is that we have entered into a situation of “actors paradox”. Productivity gains have been and will be quite dramatically different depending on the type of jobs you consider. And salaries will grow at the same pace, hence widening the gap between pay and productivity for jobs with no (or close to zero) productivity gains.



Of course, we also had to build new competencies and skills. For example, we now have a rather sizeable team watching social media and reacting quickly to messages, questions, criticisms... We also start to have data scientists or specialists for mobile apps. But those jobs are far less numerous than jobs that disappeared.

In airports, interactions between customers and frontline ground staff are changing. Customers (some of them at least) become more autonomous thanks to digital tools. They are less dependent on employees. Employees' power is decreasing. Their role will increasingly become that of helping customers solve problems they could not solve alone on digital tools. From that standpoint more expertise will be needed, which will probably blur boundaries between commercial and ground handling teams.

Mastering digital tools is no real problem, for the time being. The introduction of a new system to support ground handling – which was supposed to be an off-the-shelves industry standard – has been quite painful. But the introduction of iPads for chief pursers was really easy, and they adjusted to the tool almost immediately.

Could the need for specific human capital on some jobs decrease? Information, procedures, will be made easily available via digital tools. There will probably be a strong push for it, given the very high costs of dedicated trainings – hence a lesser need of people bearing this very specific knowledge and human capital.

We need to keep up with evolutions in the area of big data. We have concluded several partnerships with universities and schools.

And the right level of cooperation and competition with “Internet giants” is a difficult decision to make.