



Season1-Episode13: Aviation in 2023 with Tomislav Lang

Journey into the future

June 2023, time for the Millers to go on their first big summer vacation to Egypt after the Covid-pandemic back in 2020. Thomas and Xenia were worried for the health of their kids travelling with a plane over the last two years. But they heard about all the new and safe technology at the airports, to make travelling less risky.

Arrived at the airport, the family first uses the automated check-in services that utilizes biometric data to match the information from the passport with the person. Melanie and Christie have a lot of fun with the self-check-in service. Trying to trick the face scanner with funny facial expressions.

In order to avoid people queuing closely at the security, the airport uses 3D X-ray scanners to screen carry-on bags without making travelers remove electronic devices and liquids. Suddenly, when Christie places her carry-on bag on the scanner, all lights start blinking red and a loud, uncomfortable noise halls trough the hall. Thomas is instantly nervous. Xenia told him to check the bags of the girls at home before they left for the airport. But he totally forgot. He is feeling anxious right away. A lady from the airport staff comes along to check Christie`s bag: “Oh, what do we have here?” and in her hand she holds a big Nutella glass removed from the girls’ bag. Thomas explains to Christie that the Nutella counts as liquid and is not allowed in the plane. Christie is disappointed: “I am going to starve in Egypt!”.

After the situation is resolved, to Christies disappointment, the family walks through a clothes and shoe scanning technology allowing travelers to keep everything – shoes, wallets, jackets, electronics and more – right where they are.

Finally sitting in front of their gate and waiting for the boarding of the plane, Xenia opens the app “At Your Gate” on her phone to use the on gate-side food delivery service within the airport. The girls want brownies. Thomas and Xenia are ordering Cheese-Sandwiches. After finishing her Brownie, which she obviously liked, Christie concludes: “Maybe Egypt also has nice food that I can eat the next days”.

Agnes Kunkel: Hello I'm Agnes Kunkel your host in 2023 your window to the world beyond COVID-19. We have now over 36 million 16,500 confirmed cases and over 1 million people have died with COVID-19. Today is 9th of October and our guest today is Tomislav Lang. Tomislav Lang was born in an entrepreneurial family dedicated to tourism and aviation. For 20 years he held senior management positions in the aviation industry. He is a dedicated licensed coach for soccer, and he believes strongly



that training, education and constant repetition are the fundament of any success. Practice beats talent! His motto is, - In you must burn what you want to ignite in others -. Tomislav, happy to have you here in our show.

Tomislav Lang: Mrs Kunkel, hello. Thank you!

Agnes Kunkel: I always like to start with a personal question. During this pandemic, how did you personally get through these months of the pandemic and disruption?

Tomislav Lang: Well it was a full stop like for everybody. At once we had spare time that we had to facilitate for ourselves and this whole confusing situation had to be analyzed. With the lock down home became a totally new meaning – home was our office, classroom and gymnasium at once. For me it was totally clear that there is no other chance, than to start as quickly as possible again and to move forward again. So, we found ourselves in this situation to kick in with work again, to find new things that must be done. Homeschooling with our kids became the new normal, that was also something we had to look after, but basically it was just like in every situation in every crisis. Just go ahead and go on.

Agnes Kunkel: How was family life during the pandemic when you had to stay at home?

Tomislav Lang: Well, family life is always great, but I think our kids and ourselves were incredibly happy that they're back to school now. The first few days were good for everyone, but it was nice to see that also the kids understood, that school is something genuinely nice and not having the parents around every day is also something nice and important in their personal development.

Agnes Kunkel: When we think about the pandemic and aviation and especially airports, first, we think about hygiene measurements, keeping distance, cleaning systems, no touch surfaces. Would you expect that to still be in place in 2023, when the pandemic is over?

Tomislav Lang: Well, the pandemic will be over, but a lot of things will have changed, because we are changing already today. The measurements we have taken in the last few months and weeks are very extraordinary, special to see that in Europe, German aviation companies and service providers adopted very quickly. They had to move very quickly, this is what makes Germany great, It is nice to see that most of the people are looking after themselves and they are looking after the whole situation, and I think there are good things that we have learned from this crisis. We are prepared for the next thing to come, but at least if it is not a pandemic, hopefully not, we will have learned to move quicker and to be very focused on the things that happen.

Agnes Kunkel: I've looked up some tech trends, prognoses, sizes for airports and aviation before the pandemic. And one keyword was the digital shift, which we must expect and a lot more digitalization in the aviation and airport industry is that right? Is that still the direction we will go ahead?



Tomislav Lang: Yes, it will. We must go ahead because digitalization makes our world quicker and easier. That is something we are always looking after, and it is making us more efficient. Although I have to say, we are already digitalized a lot. It is not all things that the end customer sees, but if you look at baggage for example, if you look at the process of how you book your flight today, how you check in, how you communicate with your airport and your final destination, this has changed rapidly in the last 10 years. You are being informed quite quickly on what will change. What we will have to really focus on, is what is necessary and what is meaningful. And to keep aviation as it is. It is a people business, so there will be no chance to have a flight digitalized, because at the end, I have to sit in the airplane by myself.

Agnes Kunkel: When we go to an airport, like the family in the narrative at the beginning of our episode in 2023, will we still meet people?

Tomislav Lang: Yes, hopefully yes, it is very important, and I hope so. There is a lot of great people working at these airports doing a great job every day. People we don't even see, cleaning the airplanes at night, preparing food in the whole departments that we have contracted worldwide, and just because of that hopefully yes, and I'm quite sure that it will remain like that for a long time. I learned aviation, as you said at the beginning, 40 years ago almost. And there is not too many things that have changed. Actually, flying is something that has to do with safety. It has to do with feeling comfortable and no computer can make you feel as comfortable and safe as a human being.

Agnes Kunkel: When I go to the airport now, like here in Munich and I drop off my luggage, it looks to me as though it is already quite automated.

Tomislav Lang: Yes, and you are totally right. There is a lot of automation going on already. In the background, even more than you think, if you look at the airplanes and the whole infrastructure we have built there. There is already a lot of things that are not analog anymore, a lot of digital things going on in the airplanes and with the ground handlers and with the airports. Which is necessary, because with the traffic density we have, a human being alone could not match all the questions that something like that would have brought up. Today we are going back a little bit on the analog side because there's not too much traffic unfortunately, but it will come back again. But yes, and your example is just one of many.

Agnes Kunkel: Mr. Lang we talked about the automotive station in the airport. Are there limits to that trend?

Tomislav Lang: There are limits, certainly. I cannot look that far into the future, but nowadays we are living in a colorful aviation world. Just to give you one example, there is not one type of airplane. There are many types of manufacturers with many types of airplanes. We have a high density, out-port aprons, and therefore, for example robotics, will have their use. Let's take for example the bus that is carrying the passengers to the airplane, that's something that I see could be automated very quickly, and there is already a few tests at some German airports, but as soon as it comes closer to the airplane, it will be more complicated and more complex, but for now the limits are evident.



Agnes Kunkel: So, you have already used the possibilities of automatization in the background handling.

Tomislav Lang: A lot of it and a lot of others must be implemented. Then comes the question of investment and what the future will look like.

Agnes Kunkel: When I drove to this Airport, to hold this interview with you Mr Lang, of course, this airport is not brand new, but it has this little bit futuristic ambient no doubt. Typically, as you understand we are talking about 2023 which is in near future. Standing here in the airport, I have to talk to you a little bit about the wider future. Maybe 10 years, 20 years ahead as there are very unbelievable ideas about Vertie Ports, Drones lifting persons and Urban Air Mobility. I guess when you are working here you are close to these futuristic discussions and it would be wonderful, if you can give us a few impressions about these. Is this just fantasy?

Tomislav Lang: Well, if we will be beamed up to a Starship or not, I cannot tell you that, it is beyond my imagination. Maybe in a Galaxy far, far away. But if we come back and look at our world here, Airport Munich is a very modern and a very futuristic airport. Actually, they invest a lot in modern technology, and this is why it's one of the most important hubs in Europe and a five Star Airport, which is categorized by big companies. Many other airports in Europe are either not open anymore, because they did not survive the downturn after 2008, or their infrastructures are so old that they have no futuristic approach at all. So, to answer your question, I think yes, there will be Vertie ports. I think there will be drones. I investigated this as well and I find it very interesting, but it will not solve the infrastructure problems we have. Aviation is working professionally for so many years, there's a good reason why we have to use long runways in order to take off with many passengers, and this small Vertie ports or projects that we have with air-taxis, that will be something for a very specific niche.

What I find much more interesting, and this is something we're looking into with my private company, is how can we build traffic that is meaningful, but also economically correct, and how can we bring all those stakeholders together, because it's not ending with the airplane, it starts actually with how you get to your airport. I see regions already today in Germany, if you investigate the eastern part of Germany, the infrastructure getting from home to the next airport is quite complicated already. We should look into how to get those people reasonably to the airport, looking after emissions as well, being eco-friendly in the sense as well, but flying as such will remain as it is for a long time.

Agnes Kunkel: OK, so not so many drones, but typical runways and big airports then maybe different type of airplanes, like different fuels, hydrogen, electricity, will we see stuff like that?

Tomislav Lang: We already see that today. If you look back at what type of airplanes we flew just 30 years ago, these were enormously loud and dirty airplanes. Today most of aviation companies use high technologized airplane models within Europe. We are already very CO2 friendly, if you look it up in a



global perspective, just the reasonable meaning of how I use this transportation vehicle. Maybe this has gotten out of hand a little bit by traveling every day for a few Euros, where your taxi drives to the inner city are much more expensive. Airbus with this crisis already and with big studies going on, announced that there will be hydrogen fuel with electricity fuel. Norway, for example, has a clear goal and has clearly defined how they will get out of the regional network with only electricity and how they will have no fossil fuel in their planes. And this will come, and I also hope that this will come because this again will be something new to aviation. This will create jobs. This will bring the whole perspective on traveling on a new level and this is something we have to do, and it will come and it's already on the way and hopefully much quicker than we thought.

Agnes Kunkel: When we hopefully meet again Mr. Lang, in 2023 here in this airport, which at the moment is not really used to full capacity, it was expected by 2037 that we see a doubling of air transportation or air travel, but that was before pandemic times. What would you estimate is the growth path for the aviation industry now, after this disruption by pandemics?

Tomislav Lang: Well, this is a tough question. First of all, we have to know when the pandemic will be over. If you listen to scientists, which I recommend highly when it comes to crisis, listen to experts, and ask for the view from the outside. They cannot tell us when the pandemic will be over and it depends also a lot on how politics and we the people will react to this crisis. But let us predict that the pandemic already today is under a better control than it was when it hit us first. There will be downsides and there will be upsides to this whole crisis. It will stabilize next year. Also, we can only look into something similar we had with 2008, which we had with New York and then the horrific event with the collapse of the twin towers on September 11. We see that aviation is the first one to be hit strong and the last one to get out. And the same thing will happen again now. So I think next year stabilization and the growth that was pre-calculated will be just shifted a few years back, which I think is good, because it gives us time to re-analyze, look back, invest in new technologies and maybe this investment into new technologies will change this whole perspective on the growth.

But one more thing I must add here, is that growth, as we had it, was not economically good for everyone, so we should also investigate this fact. How can we change this perspective? How can the whole aviation sector become greener just to be a part of many other industries that have to become greener? It is not only aviation, but aviation was always a first mover on such future technologies, and this is the futuristic thing about us. My experts and any other experts in this world are doing the right thing, looking into the future and being positive.

Agnes Kunkel: So, I understand you correctly, you would not be surprised that when the pandemic is over and aviation is coming back, we go on a steady growth path again.

Tomislav Lang: We will go onto a steady growth path again, but we will be hit by the next crisis again. That is for sure. If you analyze the history of aviation every 10 years approximately, we run into the next downturn and crisis. Yes, maybe we should also analyze this historical data. How can we project and analyze with the help of the digital sector? How can we a future possible crisis affect the industry and how



could we prepare? Because nowadays we are reacting, but how can we become more proactive on this question? That is maybe a question we should talk about next time.

Agnes Kunkel: You are also an expert on cargo. And as I understood that you had been personally involved in bringing in face masks and protective equipment in this very first trouble, when nobody knew anything. So, what was exactly was your job and what did you do in these days?

Tomislav Lang: Well, that is something that also comes with crisis, generally speaking. Aviation companies were asked to help. Because we can react on short notice and we can solve things when it comes to long distance very quickly. The aviation industry has great pilots. We have room for cargo. We can bring back passengers which the German state did with Lufthansa, Condor and others. And again, they asked for help: how to bring back and how to deliver face masks to protect people. So that's the beauty of the game, and this is why I love this aviation industry, on one hand, we are offering a very nice service when it comes to meeting people, meeting family, going on vacation. But we can also be a problem solver, when it comes to crisis and we were, all of us in aviation, involved by carrying those face masks from China back to back to Germany.

Agnes Kunkel: Was it you who flew to China or how did you manage it?

Tomislav Lang: Well there was airlines that flew to China. They had built smaller hubs close to China and they decided to basically re-configure the whole capacity of their individual fleets so passenger planes became cargo airplanes and those airplanes were transferred into the near vicinity of China on a daily basis, they flew up to 50-60 tons per aircraft of medical equipment from China. Some airplanes had to stop in Kazakhstan for example, with the aim to exchange crew and equipment.

Agnes Kunkel: So, the stop in Kazakhstan was just for refueling.

Tomislav Lang: Mainly yes, mainly to exchange the crew to exchange equipment, because a flight from China all through Germany has its limits on specific airplanes. Also cargo has to be flown safely, not only passengers, and this is why airlines have built their hubs, there was many of them that did it and I think they did a great job with how quickly everyone adapted. It was incredible for all of us. It was like OK, tomorrow we fly cargo. Let's do it.

Agnes Kunkel: And so, you personally went to Kazakhstan.

Tomislav Lang: Yes, I had the luck with my employer who asked me, if I could be one of the cargo managers on those flights. You asked me at the beginning, how did I react to the crisis? Well, that was our reaction. We said, OK, we're on board. We will do this. It was fascinating to see how far away we flew, and how quiet it was in those Big Mega Cities as well. We flew over Shanghai, and Shanghai was basically sleeping. There was nothing normal and that was quite an experience, which I'm very thankful for. And it was nice to see that the world is a small village at the end of the day. It's a really small village.



Agnes Kunkel: What about the supply chain? You had some ideas about that. Is it a good idea to have supply chains that are so concentrated maybe on China? Or what do you think about supply chains?

Tomislav Lang: Well, after I've experienced that personally, and that's just my personal thinking, it makes sense, as long as we are in a standard mode. But we have seen that with this crisis, this chain was just cut in the same moment. So, we also must think about how we can manage in a future crisis, and it will come. We have global warming, other crises will become reality, maybe not so strong for Europe, but Europe is known for helping others. How can we prepare for events like that? It took too much time, and this was also something I think that made our politicians in every country extremely nervous; because the time to react and answers were not found right away. Which is not said that the supply chain with China or the World should be cut. We must re think the global supply chain with all of its positive and negative aspects.

Agnes Kunkel: Mitigating the risk, distributing the risk, not everything in one basket.

Tomislav Lang: It is something we do in aviation almost every day. It is all about risk mitigation and about how to solve problems, how to change things when something is impacted. Why have we not done this before on a global stage? That is a big question.

Agnes Kunkel: Good question.

Tomislav Lang: Maybe aviation can help. I do not know. We have professionals in that as a role model.

Agnes Kunkel: In the end, I always have this question for my guests in 2023. Is there something you have changed in your personal life, private or business, that you want to keep when all this is over?

Tomislav Lang: Well, one thing I want to keep, is to understand that as long as you keep on moving and as long as you stay calm and focused. There is always a solution at the end, there is always light at the end of the tunnel. Listening to facts, listening to the experts, explicitly to experts with an outside view, listening to science and after you have gathered as much information as you can, build your own mind. Do not listen to just anything, because you will not be able to handle the next crisis and you will not be able to handle this fast-moving world. One thing that did not change, the world was still moving while we were all sitting at home.

Agnes Kunkel: Wonderful thank you so much for joining us for our podcast and I guess all listeners will be excited and everyone will be ignited for the joy of flying and going up roads, that was wonderful.

Tomislav Lang: Thank you very much. It was a pleasure.