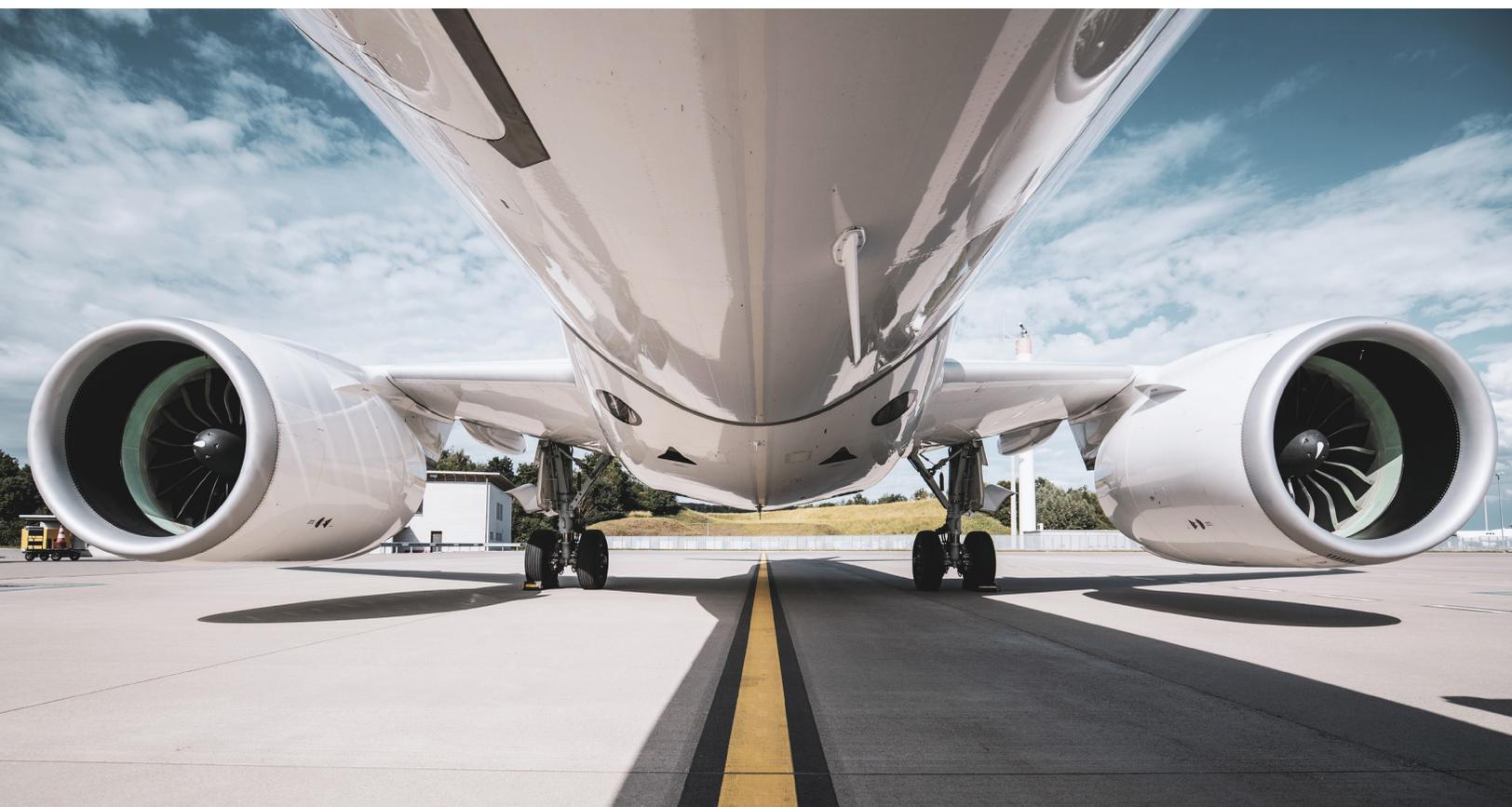


Travel, Logistics & Infrastructure Practice

How air travel is evolving postpandemic

The COVID-19 pandemic decimated airlines in 2020, yet there are reasons for optimism as the industry looks to recovery.



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In this episode of *The McKinsey Podcast*, Diane Brady speaks with partners Alex Dichter and Robin Riedel about the outlook for airlines and other industry players. An edited version of their conversation follows.

Diane Brady: Hello, and welcome to *The McKinsey Podcast*. I'm Diane Brady. During the COVID-19 pandemic, few industries have been harder hit than airlines. As we recover, few will have more challenges getting back to normal. Joining me are two McKinsey partners who have been working on these issues for years. Alex Dichter is a senior partner in London who leads McKinsey's Travel, Logistics & Infrastructure Practice. Robin Riedel is a partner in McKinsey's Aerospace & Defense Practice who leads the advanced-air-mobility group for the McKinsey Center for Future Mobility out of San Francisco.

Alex, let's start with you. Give us some sense of the current state of air travel.

Alex Dichter: Most of the world's travel went to almost nothing in April and May [2020]. At one point, we were running at about minus 95 percent, if we compared traffic in 2020 to 2019 during the same period. Obviously, some parts of the world have gone back to some degree of normalcy. If we were to look at air travel in mainland China, for instance, where the virus has been well contained, domestic travel is near normal. New Zealand and Australia, at least internally, have gone back to something that starts to look and feel like normal, and the US has some domestic traffic.

For virtually every other part of the world, what's stopping international travel, and to some extent domestic travel, is the wide array of restrictions associated with travel. Everybody wants to go on vacation. Everybody wants to see their friends and family. But if you have to get tested and quarantine on the way back, it starts to look like a daunting task. That has kept international travel to a near minimum. In fact, one of the only reasons that we see a reasonable number of long-haul flights still in place is that cargo demand is relatively strong.

An industry hit hard by COVID-19

Diane Brady: This is an industry that has felt vulnerable for years, even before this degree of disruption. What is the economic fallout?

Robin Riedel: To put it into numbers, and just for last year, 2020, the estimated impact on airlines is about a \$370 billion revenue loss versus 2019.

It's a massive hole that the industry's in, and that's just the airlines. You also have the supply chain and other sectors or subsectors. You add all of that together and you're getting close to half a trillion dollars of losses across the airline or air-travel industries. That loss has impacted the companies, on the one hand, but also the employees, on the other. We've seen pilots, flight attendants, mechanics, and all kinds of workers lose their jobs over this crisis, and with an unclear path to come back.

The question of how many airlines will survive, to a large degree, will depend on some of the government support that is out there, what the recovery really will look like, and whether we will see a significant jump back to pre-COVID-19 levels of this year, or whether it will take until '22, '23, or even '24 before we'll see travelers and revenue come back.

Looking ahead to recovery

Diane Brady: Alex, can you give us some sense of what normalcy will look like?

Alex Dichter: Predicting the future is always a dangerous game. There are two fundamental axes here. One is the degree to which the world recovers from the economic fallout associated with COVID-19, and two is the speed at which we put the virus functionally behind us.

It's clear that the virus is lasting much longer than we all hoped it would back in March or April of last year. It's equally clear that the speed at which vaccines have been developed has surprised a lot of people.

‘This is an industry where we make relatively important decisions about capacity with long lead times. You can’t snap your fingers and bring back planes that you’ve parked in the desert.’

–Alex Dichter

We’re starting to see some light at the end of the tunnel, even if the remaining bit of the tunnel is still long. While the economic fallout has no doubt been significant, we’ve not seen a crash in global markets, for example, and asset prices have continued to hold up.

Corporate balance sheets are also relatively strong, so there’s good news amid the bad. Our more pessimistic scenario would have demand not recovering until 2024. If you were to double-click on that, you’d see a much faster recovery for leisure traffic than you would see for business traffic.

Businesses, even if they’re financially healthy, have all learned that technologies like Teams and Zoom and Webex are working relatively well and can replace some of the travel that they used to do. Technologies will likely replace that travel in the future.

The more optimistic scenario might have us back to normal, or at least back to 2019 volumes, by the end of 2022. The one caveat I would make is that in this industry, you can’t have more passengers than you have seats. This is an industry where we make relatively important decisions about capacity with long lead times. You can’t snap your fingers and bring back planes that you’ve parked in the desert. To recall furloughed pilots, it takes time. Even if demand comes back sooner, it may be that

we don’t see the volumes come back until well into 2023, simply because the industry isn’t yet prepared to accept those passengers.

How employees are coping

Diane Brady: Robin, you’re out there on the front lines, talking to executives, employees, and engineers. Can you give us a sense of just what people have been doing to cope and survive this?

Robin Riedel: It’s a really challenging time for the executives of these companies and for the employees. I’ve been heartened by many of the actions we’ve seen where companies really have stepped forward to try to protect jobs as much as they could.

Employees and their unions have leaned forward to find creative arrangements that will protect jobs, help the companies survive, and work much more hand in hand than they have in the past. There have been a number of deals that reduce flying hours for individual pilots, keeping the overall number of pilots at a higher level—or reduce certain compensation packages for the short term so that the financials work out in these difficult times. That has been heartening to see. At the same time, we’ve seen massive layoffs despite all of that.

In particular, on the pilot's side, it's a challenging situation. As a pilot, you need to remain certified and stay in the role to feel comfortable flying. Many pilots who have been laid off don't really have an opportunity to go somewhere else to fly.

They're probably going to spend a year or two or three not flying before they get recalled. By then, they might have switched into another industry. They might feel that they have really lost skills and need significant training to come back to flying. There's a good chance that this will cause what we would consider to be a pilot shortage in a couple of years, simply because there are enough people leaving the industry as a result of all of this.

Leisure travel makes a comeback

Diane Brady: Alex, you mentioned the shift between the ratio of leisure to business. Airlines are constantly innovating on that front. I remember talking to somebody at a café once even about how they place the bathrooms, and how many bathrooms they have on different flights depending on how much beer people drink. How is this shifting the focus of the investments that these airlines are making, both now and in anticipation of a recovery?

Alex Dichter: There are a number of changes. On the investment front, it really depends on what kind of airline you are. Certainly, there are airlines whose hubs are in cities with enormous volumes of high-end business traffic: the banking sector, the consulting sector, the legal sector. These people historically have flown a lot, and they typically fly at the front end of the cabin. You would see airlines where the number of business-class seats could exceed the number of economy-class seats.

Many of those companies will struggle to fill those cabins in a post-COVID-19 world at first. We will see a shift in thinking about that. Over the past several years, one of the biggest growth segments that we've seen has been high-end leisure.

These are not necessarily very wealthy people, but people who see travel as the most important use of their disposable income and are willing to splurge for a better experience. If you looked across business-class cabins of many airlines over the past few years, you would've seen a number of people with loosened ties and their laptops out. But you'd also see couples clinking their champagne glasses and families and honeymooners and retirees. That will be a really important segment post-COVID-19. While a hundred business-class seats in some cases may be too much for that segment, 50 certainly isn't.

The corporate market tends to pay very high prices, and they tend to book relatively late. It wouldn't be unusual to look at a flight between London and New York a month out and see that the seat map is two-thirds empty, only to find it relatively full on the day of departure.

Leisure passengers tend to book earlier. Historically, airlines have held back on the number of leisure passengers that they would allow into those seats, waiting for corporate travelers to show up. We may see a shift in that dynamic, where we allow more seats to be sold earlier, perhaps at lower prices.

With that might come a shift toward point-to-point traffic, people who are actually going between London and New York versus people who are connecting through London from another market. All of that will likely result in lower average revenues, but it doesn't have to result in dramatically lower average revenues.

Pricing in a world without precedent

Diane Brady: Robin, I've been looking at seat sales to Miami from New York, for example, for \$60 round trip. It does feel like it's going to be hard to wean people off of some of these extremely low fares that we've become addicted to in the past few years, even prior to the pandemic. What do you see there in terms of pricing power?

Robin Riedel: On the pricing side, the challenge we're having is that the systems that manage the pricing, revenue-management systems, and pricing systems, in many cases, rely on past information and past data. However, past information is not that helpful right now to figure out what passengers really want or what people are willing to pay.

What we're finding with our clients is that customers are much less elastic than they were before. Before, you could throw out a very low fare and people would flock to it. Right now, it's not necessarily the fare that makes people travel or hold them back, but it's the fear of getting infected or the fear of being away from home and the door shutting on them. Pricing is a very challenging topic right now where there's very little precedence we can rely on.

That being said, airlines are making some progress in using what we would call nontraditional data sources and really trying to understand what drives willingness to pay. What are customers really looking for and willing to pay for in this new scenario? Airlines are looking at search trends, looking at customer sentiments, and looking at how people search across a website.

All of those kinds of things are starting to flow into the revenue-management systems and will hopefully help us manage prices back up to a more sustainable level, instead of lowering them and lowering them, trying to stimulate traffic that is really not that possible right now.

'Working around the clock' on sustainability

Diane Brady: Alex, I know you've done a lot of work with McKinsey regarding sustainability. COVID-19 has almost distracted us from what a terrible year 2020 was. I think it was the hottest year on record.

The airline industry has been front and center, both as an emitter of greenhouse-gas emissions and as an innovator on that front. Has COVID-19 shifted the focus of the industry on this issue?

Alex Dichter: Yes and no. I don't know a single CEO who believes that sustainability is not coming back to the agenda as a critical topic. It is something that our corporate clients are demanding, and our corporate clients are demanding it because their employees and their customers are demanding it of them.

The good news is that those who are working on technology innovation—the development of sustainable aviation fuels, the use of hydrogen, electrification, and such—have been working around the clock and haven't taken any time off.

Robin Riedel: There's almost not a week right now where we're not meeting with senior executives in the industry talking about sustainability. I'm both surprised and excited about the fact that this is happening, and that COVID-19 has not made this a second-order item. It's still on the top of the agenda for many of the industry executives.

We see airlines all over the world wondering what to do. Some are working with offsets, and some are working by buying sustainable aviation fuel and trying to spur that industry. Some are investing in future technology for propulsion, whether it's electric or hydrogen combustion or similar technologies. We're seeing an influx of investment in that sector.

The promise of personalized air travel

Diane Brady: There was so much excitement around personalized air travel before the pandemic. Are those conversations taking a backseat to recovery? Or are we still seeing the investments in AI [artificial intelligence] and some of the other areas that might advance air travel beyond where we are today?

Robin Riedel: We'll have to separate these future models, which are a shorter distance. Some people would refer to them as the equivalent of flying cars. These are smaller aircraft that fly, let's say, up to 300 or 500 miles.

That is a new industry. It's driven by a number of major trends, one being electrification and battery density. We're getting to a point when it becomes technically feasible to have vehicles that operate that way. There's also the drive for more sustainability.

The advance of AI makes some of this more effective. Last, but not least, is the interest of the customer to look at mobility as a service. Customers no longer just want to own a car and drive everywhere, but to hail a rideshare or look at sharing different modes.

When taken together, these trends create a fertile environment for a new mode of air transportation. We track more than 250 companies out there that are trying to play in the space. There are probably about a dozen or so of them that have significant funding by now.

We see a number of prototypes flying around. There are real expectations that in the next three to four years, we will see the first commercial models of these arrive in our cities. What form that will take, whether it's helicopter-like from one rooftop to another, or a regional model that uses airports or airport-like infrastructure to go from one city to another, is to be seen. All of these have some promise. The devil is going to be in the execution and in the detail, but it surely is an exciting time for that space.

Diane Brady: How is that picture changing, especially in a part of the world where air travel is more back to normal?

Alex Dichter: Over the short and medium-term, we see some clear shifts.

We're seeing a bias toward fewer flights and typically larger aircraft. Get as many people as you can on each one of your relatively few flights. The other reason for that is there is cargo demand. Larger aircraft do a better job of accommodating cargo than do smaller aircraft.

As we look forward, we'll see airlines looking for more fuel-efficient aircraft. They will be looking for aircraft with more customer-friendly features like Wi-Fi and upgraded business-class cabins and bigger overhead bins.

The interest in 100-seat aircraft will exist for some of the same reasons that were the case before COVID-19. Those aircraft are very useful at filling in city pairs that demand a lower cost structure than can be achieved with a 50- or 70-seat aircraft but don't need 140 or 150 seats in order to achieve reasonable load factors.

The only thing that the industry expects to change is the amount of global investment in long-haul wide-body capacity. The reason for that is pre-COVID-19, many of the world's airplanes that were flying on long-haul routes were losing money.

They were losing money because they were flown by relatively small airlines, in many cases backed by states, whose objectives went beyond profit. It was important to have these routes for political reasons: for pride, national sovereignty, and, in some cases, thoughtful links to economic development. Many governments are coming back around and saying, "Look. We've got a lot of priorities for a stretched state's treasury. We're not going to be able to keep funding loss-making operations forever."

We're seeing more and more governments asking their state-linked airlines to come up with plans that enable them to be financially sustainable. In many cases, that will mean smaller long-haul networks with fewer aircraft, which is good for carbon emissions, but probably not great for long-haul ticket prices.

Diane Brady: You both must be road warriors who also had your plans and travel put on hold. I'm personally very eager to get back on a plane again. Is that something that you welcome?

Robin Riedel: Yes. It's a bit of a mixed bag. On the one hand, I'm glad to be home more right now. We have an infant in the house. It's fantastic to be

between meetings or at the end of the day and to be able to see my son. I appreciate not being on the road all the time anymore.

At the same time, I truly miss seeing my clients and my friends and my family. I just did the math the other day and this is the longest I've gone without seeing my parents in my life. That weighs heavily on me. There's some positive and some negative in the lack of travel right now.

Diane Brady: What about for you, Alex?

Alex Dichter: First, prior to COVID-19 I was traveling more than virtually anyone that I've ever met. Typically, I would be in three continents in a week. I sleep well on planes. My pattern would be, I would get on a plane at night. I'd go to sleep. I'd wake up in another continent. I'd have a full day of meetings. I'd get on another plane that night, go to sleep, wake up on another continent, and end up back at home Thursday night or Friday morning. That allowed me to cover a lot of ground, see a lot of people, and do so in a way that was relatively sustainable from a lifestyle standpoint. Remember, I sleep well on planes, so I got as much sleep on the plane as I would typically get at home, and in some cases more. That has changed dramatically.

I have been on a few flights, particularly on the long haul. As an aside, some of the conversations I've had with crew have really been touching. I was on a flight between the US and London with eight passengers on board. The crew were practically in tears. It was their first flight in months. They understand very well that without passengers, they don't have a future. I certainly hope for their sake that we see as much of the demand coming back as possible. Like Robin, I see some benefits to this.

I find interacting with my colleagues, whom I know well, to be much more efficient via these kinds of technologies. I don't need to read their body language. I do want to see them on some cycle, but we can get a lot done very quickly.

The fact that nobody is traveling also means that calendars are much less rigid. If I want to get a client together with me for a discussion, I usually find an hour within a couple of days. In the old world, we'd often go back and forth for a couple of weeks trying to match up calendars and find a time when we could both be in the same spot on the globe when neither of us were someplace else.

That will be something that I don't want to give up. At the same time, I am in this business because I want to help people. I like people, and I like getting to know my clients on a personal level. That is hard to do via Zoom.

I will do a lot less internal travel. I will replace some of that space with more client travel. The other thing that I've noted, and I've heard others say the same, is that in the future, I may need to see in person everyone in my personal network less frequently. Every two out of three interactions we can do remotely, I'm also meeting more people.

I wouldn't be surprised if a couple of years from now, you find me doing as much travel as I was doing before, but perhaps getting more out of it.

What industry leaders should know

Diane Brady: To those in the industry, any advice?

Robin Riedel: There are a couple of things worth keeping top of mind here. One, making sure to understand what are the relative risks and what does the latest research show about what is considered safe, or what is relatively safe, versus what is risky behavior? Even within travel, with the many studies that have been done, there's enough evidence to show that air travel is relatively safe, and you can protect yourself with a few measures.

The second thing is to really think through what is essential travel; how do you define that, and guide your organization? The questions are going to be, "How do you roll back into travel? Do you just go back to where you were before, or do you adjust

your travel policy and make some adjustments for things like safety, the environment, and how we've all learned to work with modern technology to avoid some of the travel?"

Diane Brady: Alex, anything you'd want to add?

Alex Dichter: Everyone needs to be prepared for a two-speed recovery or return over the course of the next 12 months. None of us really know how the summer is going to play out.

Expansion may prove to be complicated. When demand falls off, your reduction in capacity trails the falloff in demand, almost by definition. When there are fewer people on planes, you reduce flights. As you reduce flights, you reduce pilots.

When demand comes back very quickly, by definition, it will come back faster than you can bring capacity on board. At a time when airlines are going to be looking for as much goodwill as they can get from governments, labor unions, and their passengers, there's a very high risk that we'll see long queues in airports, lots of delays, and canceled flights. We're simply not ready for the demand that appears, and I wish I had a better answer as to which one to prepare for. We need to be ready for both.

I would also leave airline executives with a longer-term thought. I hope that five years from now, everyone will still be talking about COVID-19 agility. What I mean by that is the speed at which we were able to get difficult things done during COVID-19.

Many airlines have moved to a world where what used to be eight-week, 12-week planning cycles are now done in one to two weeks.

My hope is that we retain some of these learnings, and maybe move to a world where we stop telling ourselves that every major innovation needs to, by definition, take several years to implement. We can start acting a little bit more like digital leaders, who tend to get things done quite quickly in a trial-and-error kind of way. I'm speaking more about the

commercial side than I am about operations, where safety is paramount in our industry.

How COVID-19 has driven industry innovation

Diane Brady: Can you give me some sense of what's on your radar and what you're watching over the next year in general with regard to the industry?

Robin Riedel: There are probably four or five different themes here that are becoming important into 2021 beyond COVID-19. We need to get more serious and find better ways to abate some of the carbon we're producing.

A second theme will be what we call the future of air mobility: the Electric Vertical Takeoff and Landing [eVTOL] space or advanced-air-mobility space.

Another theme we haven't talked about is cargo transportation by drone. We're seeing a broad number of trials around the world where vaccinations or blood transfusions, or even medication and e-commerce packages, are transported by drones over the short range or over the long range for the last mile.

In the more traditional airlines, customer experience is going to be one to watch. As we come through COVID-19, smart airlines will take this as an opportunity to make things not just safer but also better. Whether that is self-service at the airport, some of the digital offerings they have, or onboard product, we're seeing a number of changes coming that will make travel better in the future.

Diane Brady: Alex, what would be on your radar for people to watch over the next year?

Alex Dichter: I'm hopeful that we'll see a couple of things. We'll start to move from a world where the industry is focused on survival to a world where at least parts of the industry are focused on long-term success.

Let's recognize that this is an industry that, for the better part of its 75-plus-year existence, has not made a dime. Part of that has to do with a very challenging structure: too many airlines, outdated regulations, very powerful supply chains.

I'm looking forward to some of the innovations that will naturally come out of this. Several of the changes that the industry has put in place during COVID-19, particularly moving from physical touchpoints to digital touchpoints, are hugely relevant. Digital technologies allow people a sense of control and transparency that I think everyone

wants. As a passenger, I'm looking forward to some of those changes.

Diane Brady: So much fodder. If you'd like to hear more, please do go to [McKinsey.com](https://www.mckinsey.com). We've been speaking with Alex Dichter and Robin Riedel. Alex and Robin, thank you so much for joining us.

Robin Riedel: Thank you for having us, Diane. It was a pleasure.

Alex Dichter: Thank you, Diane.

Alex Dichter is a senior partner in McKinsey's London office, and **Robin Riedel** is a partner in the San Francisco office. **Diane Brady** is an alumna of the New York office.

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