Jonathan:
Hi, everyone. Welcome to the Embark podcast. The connected journey begins now. Boarding has started. Today we're talking with two very special guests. The first is Charles Duncan. He is the president of Swoop Airlines in Canada, and also the EVP of Strategy at WestJet. Also joining us today is Simon Gandy. He is the Chief of Infrastructure at the Melbourne Airport. And we are going to talk to him about his perspective on how cloud can help the airport and the airport with airline clients and customers to deliver a better experience and hopefully trying to do that at a lower cost. Also joining us today is Harish Ranganath, who is our Travel Technology Lead at Accenture. He is US based, has had several stances around the world and is somebody who has great experience working with all sorts of travel clients.
Last, of course, I'm Jonathan Sullivan. I'm the host for today's episode. I am Accenture's Cloud First Industry Captain for Travel. and I've got a lifetime of experience within the airline industry and the travel industry, trying to help make travel companies more profitable.
First Charles, thank you very much for coming on the podcast with us. It's a pleasure to meet you and finally make this connection.

Charles:
Well, thanks for having me, Jonathan.

Jonathan:
So Charles, what we're talking about today is how cloud is going to impact travel in the future. The difference between what's gonna happen with the travelers from the traveler's point of view, and then also from an airline point of view. And for our listeners who don't know, Charles has this amazing background where he has worked in almost every aspect of an airline and from a strategic point of view, he's thought through every aspect of an airline. And now he has the responsibility of managing every aspect of an airline. And so we're going to get a good perspective here, because he can think across all of the different perspectives and he's got the experience to know where, where we sort of run into problems.
So may I quickly just summarize our hypothesis on why cloud's important to airlines and to airports, and then where we think things will go. So for us cloud is, just where IT development is moving. Um, the fact that you can experiment quickly, that you can scale quickly, you can do that in a secure environment without going through months of development and procurement cycles to procure servers, to expand server farms. The things that would slow down traditional IT development. It means that airlines can get better very, very quickly. Um, and we see them passing through a phase.

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Once they've done the first portion of the cloud transformation where it's just IT doing IT work and nobody in the business knows any difference. And to where they're connecting the overall travel journey within the airline silos. So each silo starts to run a little bit more efficiently, works with its data a little bit better. Again, most travelers probably won't sense much difference when that takes place. And then before long, the airline silos can cross a little bit better where service delivery should go up while cost comes down, because we're going to automate out so many of those bridging tasks that we have today and learn where connections aren't quite working right in an airline. And then we'd like to connect various elements of the ecosystem a little bit better. So. Wouldn't it be nice, if the airport itself was able to tell the airline: Hey, I've got big problems with security right now. And the airline didn't have to rely on his gate agents saying: Hey, there's big problems with security right now.

Charles:
Right. Absolutely.

Jonathan:
You know, or, or coordination around gates at different airports, things like that. And then my big dream is: let's find a way where baggage service looks and feels like a product people like. So that people can board an aircraft cabin really, really quickly. And that, we're not having our best, highest paying customers sitting in the seats the longest amount of time to get that boarding, overhead capacity space, but they trust us to take their bags. So they get it back without ever having to wait. And they'd be happy to pay for that idea. So that's that's our big view of connected travel. The ecosystem will just connect over time naturally in the cloud. And we're working towards making that reality true for lots of airlines around the world.

Charles:
If I can just react to that, and thanks for the kind words. I've been in the airline business for 25, 26 years now, and I've been really fortunate to have done a lot of different roles and you know, I am not an IT expert. I'm certainly not a technologist. And so when we talk about the cloud, our IT team at WestJet, do talk about and have been for, for several years about a pivot to the cloud and a real desire on our team's part, to retire legacy systems in our data centers. And we maintain two for redundancy in different parts of Canada. To get to the cloud so that we can do all of the things that you've talked about and in terms of having better security and frankly not having to maintain and have that risk, our own data center, it's not a core competence for us. All of this rings true. But when you get into the use cases that you, were describing, that's where I get excited. And these are all challenges. Whether you're a traveler, going through the process or someone who's running the airport and various, elements of operations, or even the commercial side of the business, there's so much we can do. I think about guests coming into the airport terminal, and, every airport is different. Three or four different options for security checkpoints and have visibility into what the actual line weights are. And I recall that the Dulles airport in Washington years ago, did have an app with TSA where they were actually presenting real-time data, but it was even, that was a little bit clunky. And I think about using Bluetooth and beacon technology and, again, the cloud as you described it and just measuring that without having any sort of human intervention is fantastic.
I think about, for airport operations, unmet aircraft, where the ramp team are not there to marshal an airplane in is one of our biggest pain points everywhere. And there has been always a challenge of how do you get into the ramp team's hands the information around accurate ETA times. And that's something that is seen as a challenge at multiple airlines or airports around the world. And you're right. Baggage. There's always, there's long been this Nirvana or this north star around RFID and real-time tracking and so forth and scanning of bags, but we still have a long way to go. And I think we still mishandle far too many bags in this industry and we could go on and on. I mean, there are so many pain points.

Jonathan:
You've raised an interesting perspective. I think most of our listeners won't understand the complexities of the different parties that are working in the airport environment, themselves, the different companies that are doing all of the work that we experience as travelers as we go through. And the fact that taking good information around when the aircraft is going to come in and getting it to the rampage, which probably in a lot of cases for low cost carriers doesn't work for the airline, but works for another company. It is a lot more complicated than we would think. Can you explain the various ways that that data gets passed through? And then we can think about what we would want an airport to do to actually make that work out better?

Charles:
If you evaluate the process for turning an aircraft, and think about the airport process at a gate, there are dozens. And I do want to say it's close to 50 or 60 different steps that are involved in receiving that aircraft. And then everything that happens at the gate in between flights and then preparing for departure and examples of those would be, assigning a gate and having a team marshal the aircraft in parking, and you have to chock the wheels so that it's safely secured.
So, we’re measuring through beacons and timestamps, through the entire process to try to recognize: When do we need to escalate a problem? Hey, a fuel truck isn’t here yet. We’re 30 minutes before departure. If a fuel truck doesn’t arrive in the next 90 seconds, we’re going to have a flight delay. And flight delays are quite costly for an airline. And of course, a major driver of customer satisfaction as well. And so, so there’s typically, someone, monitoring all of these different steps in the choreography. And of course they have to be often performed in, in a very carefully orchestrated sequence to make sure that it all comes off as well. So, hopefully it’s self-evident through that description, how important technology is to optimizing that performance. And for us, it really comes down to all airlines and certainly an ultra-low cost carrier, like the one that I run it’s Swoop, where, the airplanes make money only when they’re in the air. And so we’re quite motivated to make those turns as we call them to the whole arrival departure process, as short as they can possibly be.

Jonathan:
So you would like from the airport basically sensors, beacons, 5G tracking of everybody that's involved and all the parties. So you'd know where they are at any one time. And then you'd like internally the ability to help direct any of your staff or your direct contractors to make adjustments on the time or help them make their own decisions around what adjustments need to be made on delaying a flight or keeping a door open, or trying to rush an extra cleaning crew in, if the cleaning didn't happen on time. Something like that. And that can’t be possible if you don't have access to all that data. Right?

Charles:
That’s right. But at the same time, and this is where it’s going to sound completely unrealistic. We’re also focused on cost. And so we have to make trade-offs around cost and I’ll give a, maybe a simple example of this. It’s probably going back almost 20 years.

About 20 years ago, airlines and airports, depending on how they’re set up and structured, put in kiosks in the lobbies. And the thought was at the time that this would, lower airline costs, through just, having fewer staff and making the process more streamlined and seamless and all of these kinds of benefits. And, in my experience, the airlines never cut the staff. And never got the efficiencies and actually ended up with a more expensive check-in process, in spite of the technology. And so I just used that as a cautionary tale for us, that, because our margins are so thin while we do want to, and must rely on technology to drive operational efficiencies and enhancements. And I just always asked myself: Is the customer willing to pay for this? You know, or not.

Jonathan:
And then I guess one of the things we’ve seen elsewhere in the world: Should the airline be linked into the retail process in the airport as well? Would you like your airports to be able to link the retailers that are working in those airports with your, you know, on aircraft flight systems? So folks can buy from those retailers and being delivered before or after when they get home from their trips as well. And you, you serve as a point of sale for them and make a little commission?

Charles:
Absolutely. For us for airlines, you know, globally, our margins are typically so thin. If there's any chance for us to earn a commission, do something else to help generate revenue and frankly help the traveler spend that time there in the air. It makes all the sense in the world to me. If you think about old school and there still are a few airlines that do this and have the duty free sales. But it would be so much more efficient to offer a wider selection of products and have the traveler on the airplane, select that from an online catalog.
And then we're not having to carry those things on the airplane and consume the fuel to carry them and pay for all the logistics of loading and offloading and so forth and the airplane, and then just deliver it to them, to their home or, when they come through customs or whatever the airport. I do think that's a great opportunity to just create some synergies between the airport and the retailers and the airline and make a better experience for the consumer.

Jonathan:
And that's one of those areas where we - it's just a natural fit for cloud for us, because if the airport can help put the infrastructure together and the airlines can set up the selling infrastructure, we can scale that up and down very quickly, customize it by airport, by journey really quickly for each traveler. It makes all the sense in the world. It's not that difficult to do these days either. We've seen places like Singapore do that, and we'd love to see other airports around the world move in that direction, because it creates this virtuous loop to bring the cost of air travel down.

Charles:
It does. All of us are motivated to do that. For sure the consumer is always looking for a good deal. That's what we offer at Swoop for sure is just unbeatable, fares and pricing. One aspect just to flag, as you know, there are regulatory concerns. There only are a handful of countries that do allow, arrivals type duty, free sales. And so then you're having to then add duty to the, to the price and, and so forth. And it becomes a little bit of a less compelling, special offer, but, I do love the idea and in any sort of creativity like that, where we can collaborate, makes all the sense in the world.

Jonathan:
I guess the question is these aren't new ideas, or you said, why can't we move faster to get these moving? And help build a faster virtuous experience between airports and airlines.

Charles:
I think it's always more complicated than it seems. And I think part of that is each airport is different in terms of its, uh, IT infrastructure, who it uses, even the vendors they have and so forth. And so unfortunately it's not as simple. If you think about how we distribute our tickets, we all have our own websites and then Swoop does not, but many airlines will then take part in the in the GDS as the global distribution systems like Amadeus and Sabre. And on the airport side, they're much more bespoke and it would require an airport by airport development project if you will. So I think, there there's that complexity and I think the other piece in the airline business is that there's this ultimate irony that we were probably the first network industry. You think about the green screens in the 1950s or sixties in the beginning of Sabre and so forth. And so we have these old mainframe systems still that we rely on and, they just... it does make it difficult to connect with a more modern IT infrastructure. So I think that some of these legacy systems that are still around do do still hold us back.

Jonathan:
Well, I think I heard, and I don't know if it's still true, but at least a year ago that the airline industry was the biggest buyer of dot matrix printers even to this day.

Charles:
I believe that is right. And you still see on that and it's tied back to the same point, another aspect that just floors me. We are still in many cases downloading, operational parameters, aircraft data, engine data using floppy desks. You find these examples of, old technology. Look, it works. It's, it's tested, it's tried and true.
And with the new technology, the new aircraft, of course, they've got just, ...terrabytes of more data available. And they're streaming them through, wirelessly to us, but in many cases, we're using quite ancient technology and systems and, and it becomes hard to stitch all of that together.

Jonathan:
Right. I had no idea you were still using the floppy disks. Not you. I mean many airlines are, uh, yeah. I'm sorry. Not here, but the industry in general, I need to get one of those to show my children. They've never seen one, but. Charles, it's been a real pleasure talking to you and getting your perspective on how we might make the airline airport and cloud connection work in a more virtuous circle for airlines, airports, and our passengers. Charles, thank you very much, really enjoyed talking to you today.

Also joining us today is Simon Gandy. Who's the Chief of Infrastructure at the Melbourne airport. And we're going to talk to him about his perspective on how cloud can help the airport and the airport with airline clients and customers to deliver a better experience and hopefully try to do that at a lower cost. And obviously the public [...] that we have within the terminals, like huge stress. And there is an absence of a clear pathway out at the moment. So assuming that we know what our customer airlines need right now is probably the biggest mistake an airport can make. Well, I would say right now, a good airport is one that is getting really close to its customers and trying to understand the needs of those customers, as well as trying to balance its own needs as a business in terms of making sure that it can continue to operate. In Australia, our requirement is to provide access to airlines. We can't turn airlines away, under the airports act. So we have to remain open. So obviously the, the great airports have stared into that and gone, how do we manage continuing to open an airport when you're down at 1%? And obviously we've done a lot of gazing back inward by our airport to make sure that we can trim out all of those things that are necessary when you've got such a small number of passengers going through. But you're still keeping your fundamentals around safety and security and compliance running. So, I think our journey in that whole context of being a good airport, so far, has been that relentless focus on the customer and making sure that we have a safe and secure business. Now that's a very short-term view. Now let's do a bit of gazing into where I think the future might be for the good airport coming out of COVID.

Simon:
Yeah, that's a broad, broad question, Jonathan. I think you could very quickly go to the bricks and mortar couldn't you on that question, but let me start with, more of a relationship perspective.

With many months of devastated demand as we've seen. So we went out demand, went off a cliff down to 1% here in Victoria for about four months. So significant impact on the airport. But imagine those customers who are the people that are flying, flying the passengers and all of those businesses, that are gaining revenues out of the retail and the food and beverage, and, and obviously the public [...] that we have within the terminals, like huge stress. And there is an absence of a clear pathway out at the moment. So assuming that we know what our customer airlines need right now is probably the biggest mistake an airport can make. Well, I would say right now, a good airport is one that is getting really close to its customers and trying to understand the needs of those customers, as well as trying to balance its own needs as a business in terms of making sure that it can continue to operate. In Australia, our requirement is to provide access to airlines. We can't turn airlines away, under the airports act. So we have to remain open. So obviously the, the great airports have stared into that and gone, how do we manage continuing to open an airport when you're down at 1%? And obviously we've done a lot of gazing back inward by our airport to make sure that we can trim out all of those things that are necessary when you've got such a small number of passengers going through. But you're still keeping your fundamentals around safety and security and compliance running. So, I think our journey in that whole context of being a good airport, so far, has been that relentless focus on the customer and making sure that we have a safe and secure business. Now that's a very short-term view. Now let's do a bit of gazing into where I think the future might be for the good airport coming out of COVID.
We talk about the learnings that we’ve had through COVID, and the fact that we don’t want to go back to where we were before we entered into COVID. Even though we were an airport that was growing at plus 8 plus 9%, particularly in our international marketplace, but that, that for us, is not good enough to just go back to, because we’re in the recovery mode. And then we’re in a rebuild mode. And that rebuild has to really capture all of the benefits that we’ve learned through COVID. And the sorts of things that I’m talking about there are making sure that we, we build on the agility that we’ve found through COVID and we build on the real thirst for information.

Jonathan:
Let's talk about the information for a second. You did pick my interest there? Tell me a little more, please.

Simon:
If we continue to look back at the historics, which I guess businesses have done for a long time pre-COVID, where you look at the monthly report and go: Oh, that's really interesting. What are we going to do now? You’ve probably lost six weeks. Whereas we’re trying to compress that into what are we doing right now? What decisions can we make today? What decisions do we need to make for tomorrow? And of course that requires us to have really good insight into that information flow from our business.

Jonathan:
Yeah. Well airports, people tend to think of generally as a place where a lot of fast movement happens, but a lot of careful planning is done for the airport business itself. So what kind of decisions can you make in the day or in the week that impact how your operation is running, and help make that experience better for customers and for airlines?

Simon:
In my experience of working with airports for over 30 years, it's always interesting that every day starts with a really clear plan. It's called the schedule. And literally from five minutes into the schedule, you're off schedule. So, our focus is moving the business to a planned working environment where you have a plan and that plan is driven by your customer's schedules, it's driven by your preparedness for what you're forecasting to be your passenger volumes. And then you're tuning that on the day. So the sort of thing that we would be changing during the day could be down to where your [...] bring staff to, whether they're doing roving security, assessment, or whether they're actually in the heart and the melting pot of the security point where the volume is. Depending where your cleaners are gonna be at a point in time to suit certain demands that may, you may have been expecting at half past 10 in the morning. Well, guess what, they're now coming at half past nine. So responsiveness during the day is the type of thing that we would be looking to move towards. And obviously that means you need a great, great relationship with your supplier, as well as your customer airlines to get good information upfront on that sort of stuff. Are we starting with the same plan, first of all? And if we are great, well, that's number one, but then breaking it down into: So who's managing which of these resources so that we do end up getting that super value minium leaving, leaving the runway when it was, when it was due to, and it all comes, it all comes together on the ramp.

Jonathan:
Oh, the ramp environments, it's sad. It's a place most customers don't see. Can you, can you describe for our listeners what it looks like and what it feels like down there and how you from an infrastructure perspective, try to work, to make the hidden part of travel better?

Simon:
I think some of this has been brought to life in the past with the, um, TV programs like “airport”, which was the regular series around Heathrow and how it is operated.
Watching a turn of an aircraft is probably the most exciting and revealing things that you can do if you're involved in the aviation industry, because it's only there that you actually start to see all of the things come together for one thing, an aircraft coming on chock. You're seeing, various bits of equipment, then attach itself to the aircraft, light loading bridges, um, like fueling vehicles, like the baggage deployment vehicles. And it's literally all of a sudden, like all of these results that are coming out from nowhere and coming to surround the aircraft and actually do their task. And it's almost so well-orchestrated that, that you're just seeing people getting on and doing their job. And because they've got an instructor at this point in time, they had to go out and collect bags or they have to go and refuel this aircraft. So that whole kind of deplaning process happens and happens relatively quickly because the airlines keen to get the passengers off plane the aircraft, and then bring, bring the crew on. And then the passengers for departing. So it's literally a de-planeing, re-planeing exercise. It's this process of making sure that all of those elements that actually need to come together at a point in time do so as close to that time as possible, and then that plane departs, but that that's just the stuff on the ground. Nevermind at the bay that that aircraft is flying to, which could be hundreds of miles away. There's a similar preparation getting ready for that aircraft to arrive. So not only is there information flow locally within the airport, around how all of those elements come together, but there's then also the connectedness between, sovereign parties across the countries to say, actually, Then there's a new element. That's going to arrive in seven hours' time and it's going to have this many passengers and this nice cargo and needs to be refueled and blah, blah, blah. So, it doesn't stop through the day. There's no respite really of the connectedness of information. Jonathan:

And when, as you said at the beginning, when things don't go quite according to schedule, five minutes into the day, and then the rest of the day, we're recovering, the airlines recovering the airport, security operations recovering, but the ground teams are recovering...How do we help those recovery process teams build better plans for recovery going forwards? What kind of information do we need to share amongst the various parties that are there and how do we, today? And how do you want to share that information going forward so that everybody can make better decisions to make better recovery plans?

Simon:
The information sharing, I think is important around the, the why things happened. And the response that was taken in, at the time, given what people knew. I think if you step back at this and do this solely with information, you need the human being element in there, making the judgment call on the why certain things happen. So what are we going to do for tomorrow's plan? Or what can we do for tomorrow's plan that actually might mitigate that. Even just being aware that you have those interdependencies and inaccuracies in time enables you to start building in certain fire breaks or certain ways of recovery. And I know obviously airlines are used to doing this, um, through that they're dealing in the way that they time that they're operating them because they know it's not a float system, but it's a vulnerable system to, many changes from many elements, but the more you can come away from [...] those fire breaks and making those as small as possible, the better the efficiencies become. So I think that's where the real focus will be in the future, Jonathan. You're just making sure that the impacts that you will have during the day are as minimal as possible as you can make them. And some of them will be out of your control.
Jonathan:
There are so many parties involved in pulling together good air travel. That just cries out for more information. But Simon, a real pleasure. I do hope to one day hope to actually meet you in person.
Harish, really interesting listening to both, Charles and Simon kind of compare and contrast the different state of readiness and perhaps the ambitions and some of the technology constraints holding us back both in the aviation space and at the airports themselves. What are your thoughts as a technologist?

Harish:
One thing was pretty clear, listening into both of the guests. That technology, plays a huge part. But more the specifics. Now that the travel industry is on the rebound. What does it actually mean? And how does the airport experience actually matter? We did discuss that a lot of people do spend a lot of time at the airport. And who can that be made a lot more pleasant? And that's where I think technology plays a huge part. That's the feeling I got, Jonathan. What’s your take on it?

Jonathan:
Well, I was most incapsulated by the challenges on the ramp. And you can imagine at operations if people don’t really know an ETA of an aircraft, it’s not gonna be that efficient. And we certainly should be able to drive more cost out and have a better environment down on the ramp if we can improve the data flows across the aviation ecosystem. And I know that’s a challenge, because there are so many moving parts. And as we listened through Simon’s point of view on – really I just like everybody to get together. And his point of view on I want to get everyone together so that we can figure out where we have to focus next and get these basics right is something that will need to happen independently at almost every airport. And the other thing that I think will be fun, and we did hear different views on this both from Charles and Simon. Charles’ view is very much: Anything we can do to help the airport make more money from non-aeronautical revenues, is something we’d like to do, as long as it does not raise their cost base too much. And finding those win-win opportunities fast for aviation, felt like it was more in the airlines head at the moment, that it was in the airport’s head. Where the airports are understandably taking a bit more cautious view, as their volumes are entirely dependent on their location, they don’t have a network to mitigate risk from. And they say: Well, let’s make sure we get it right.

Harish:
Yeah, absolutely right. But I have a question, Jonathan. What is it that you feel is not allowing us to move at a faster pace?

Jonathan:
It’s a classic one to many problem. Airlines have a single system and they need to do it across different airports for a consistent experience. Airports have a single environment, but they have to integrate with many airlines. So it’s just a classic network problem. We have to find a way to break it into pieces and stitch it together over time, so that it’s intuitive for both customers and employees. And given how much travel has changed in the last few months with the Covid restrictions, and how well customers are responding to dealing with that, I certainly think we should be able to do that over time. We just want to do that in a way that does not cause increased complexity burdens on the airlines. It’s just at matter of time.
One final question to wrap-up: What surprised you as you? As you listened through to this, what surprised you? What did you learn?

Harish:
I think the learning part was turning the plane around. How much it takes and how important it is. And how though everybody feels that something we should look at and we should optimize the steps and the processes steps involved. But it’s not easy.
The way we heard them talk about what it entails and why it's such a big challenge. So that was something that I learnt. Although we kind of knew it's not a simple process - the way it looks to us as passengers, as travelers. But that was one thing. What surprised me is when he said, and I think it was Simon who said: Within five minutes of the day starting, the entire schedule they have is like dust out of the window and they are like: Right, what do we do? Well that's a massive amount of change that we got to live with, manage, and still deliver.

Jonathan:
As one of my favorite IOCC leader says: The airspace is perfect at midnight and then it starts to degrade the next minute thereafter. Again, I would like to thank both, Charles and Simon for joining us on this podcast. I would like to thank our listeners for tuning in and encourage you to come back for the next Embark podcast.