



The Deloitte On Cloud Podcast

David Linthicum, Managing Director, Chief Cloud Strategy Officer, Deloitte Consulting LLP

Title: How AeroCloud helps airports leverage cloud and AI to enrich the customer experience

Description: In this episode, David Linthicum talks with AeroCloud Systems Ltd. CEO George Richardson about how his company helps airports leverage cloud and AI to make better decisions that lead to improved customer experiences. George's take is that cloud and AI enable airports to connect disparate data sources, analyze data more effectively, and use it to transform their operations. The result? Enriched customer experiences that produce higher revenue and—potentially—increased market share.

Duration: 00:21:17

David Linthicum:

Welcome back to the On Cloud podcast. Today on the show I am joined by George Richardson, founder and CEO of AeroCloud. George, welcome to the show. How are you doing?

George Richardson:

Fantastic. Thank you for having me.

David Linthicum:

What I love about this show and having you as a guest is you come prepared to not only talk about technology, which a lot of people can do, but also a particular use case that I think is going to be of interest to the listeners. So, I'm really happy to take you through that. But first, let's figure out who you are. Where did you come from, and how did you end up working where you're working now? What's your journey been like?

George Richardson:

Yeah, absolutely. I've been around sort of the entrepreneurial spirit for some time. Both my parents never had a job other than working for themselves. So, over the family dinner table, every evening was a discussion around P&L, growth, hiring, firing people difficult conversations, succession. Also, as a family, we navigated the 2008 financial crisis, as well. Through that period of time, I was looking to achieve my boyhood dream of becoming a professional racing driver, which I achieved at the age of 16, and I had a ten-year professional career and retired when I was 26.

That's when I met my cofounder in a coffee shop, and we started to talk about problems that could be solved, and this is one of the problems that we're currently solving. That's how AeroCloud was born. I'm delighted to say now we're nearly 60 people and 60 customers globally. Since then, we've raised nearly \$18 million of venture capital-backed funding. So, I'm delighted to be in the position I'm in. I'm still eager to get to work every morning. I sleep very little, and it's a lot of stress, but at the same time it's incredibly enjoyable. As long as I keep getting better and I keep enjoying what I'm doing, then I think there's no better place to work than AeroCloud.

David Linthicum:

Yeah. It's fun being an entrepreneur. So, how do you become a professional racecar driver?

George Richardson:

The interesting thing about racing is it's I think a lot of people will tell you that it is, but it really isn't. My dad was growing up in the Lake District back in the day. He had to go to work early because of the loss of his father and always desperately admired motor racing. When he was in a position where he could fund himself and to try and develop a career himself, he was never able to. He was effectively too old. That's the dream that had gone with him. Then luckily for me, as a four-year-old, just as a pure hobby, anything with an engine every single weekend we'd be racing, sleeping in the back of a van, traveling up and down the country. When it transitioned from a hobby to a profession was around the 2008 financial crisis where our family couldn't afford to keep it as a hobby anymore.

It turned into a profession out of the fact that I couldn't effectively do anything else. I had a great education, but this was my sole goal in life and something that I felt really deeply about. The reason why I retired, sort of the other end of the question if you're interested, is that I wasn't getting any better at 26. I was much better at forming relationships on the commercial side of the motorsport business, making far more money from the commercial side of racing than I was from the actual driving. After a couple of very difficult conversations, it became clear that I wasn't getting much better, and I needed a new challenge. That was the decision to part ways with the sport and sign away that chapter and start a new one as a CEO at a startup.

David Linthicum:

It sounds like you've been successful at either. I like the fact that you just transitioned careers. It was probably a tough thing to do, but it sounds like you made some decisions that were right for yourself. So, within your current business, how are you seeing cloud computing? How do you see the value of this stuff that comes back to yourself and your clients, efficiencies, optimization of resources, those sorts of things? How does it relate specifically to your work with airports?

George Richardson:

Airports are one of the most complex environments that one would ever come across. I mean we have retail. We have security. We have government. We have processing. We have massive amounts of data. We have hundreds and hundreds of important, pivotal, mission-critical stakeholders. What's really interesting about airports on the flip side is that they haven't necessarily caught the cloud hook until the last couple years. That's where we came in, is that we gave an alternative to them, accessibility to all, therefore scalability and rapid implementation to get airports onto the cloud, and we've never looked back.

Our 50, nearly 60, customers have never looked back also. It's amazing to think that we're bringing customers from not just off cloud onto cloud, but from spreadsheets and put-together pieces of software that aren't necessarily achieving operational efficiency for them, and are actually deducting from their ability to grow. So, what AeroCloud provides, and I'm sure we'll get into it, is the breadth of services that operate via the cloud, that give an enhanced cost efficiency, rapid implementation, scalability, both growth and reductions. So, take COVID as a classic example, pre-COVID, then COVID, then post-COVID, and the ability to collate millions of data points and relay them to the decision makers in real time.

That has been a major contributing factor the success of our clients and something that they have proven to be very happy about. And we've sort of created an evangelical tribe of customers that start to recommend us now to other airports, and we haven't looked back. My job as the custodian of the company is to encourage airports to think outside the box, encourage them to speak about their problems, encourage them to say, "Your problems aren't unique and they can be solved," and then give them a platform in order to do that on a modular-based system that they can grow into over time. That's really our MO.

David Linthicum:

There's kind of two aspects to identifying the value of cloud for airports and other problem domains as well. There's the hard value, in other words, the efficiencies you get from the cost savings immediately in not supporting their own hardware and software, the ability to kind of shift that burden to somebody else to manage, and we can see those at the bottom line at the end of the month each month. But there are soft values that are much harder to define, the ability to get to an agile state, the ability to have scalability and the flexibility that you didn't have before. Those are much harder I think for people to understand. How are you defining those for airports?

George Richardson:

That's a great question. Even though in my last answer I said that problems are not necessarily unique per airport or compared airport-to-airport, there are different use cases across each one of the customer sets that we have, usually with regards to territory, location, states, for example, or local governing bodies and their relationship with cloud. But the less tangible stuff that we find that is a commonality between the problems that we're solving and the customer need and the use case for cloud is information to all.

That can be as simple as having a mobile application that doesn't require an Internet connection, can work off 5G anywhere on the apron, from home, from holiday, whatever it may be, to give data-driven decision makers the ability to relay that data and act from it, either in real time or proactively to help them solve problems of the future and plan for those. That scalability and that ability to amass data and check it out and use it in real time is just something that wasn't possible via per user license, fixed place, BBC, infrastructure type scenario for them previous.

David Linthicum:

It seems like airports would be a good use case for something that changes quite a bit, and certainly something that has to do with compliance, probably more compliance than say financial institutions. Are you dealing with different levels of compliance in different situations from country-to-country? Is cloud providing the ability for anybody who is dealing with compliance to adapt to different compliance and changing regulations and changing laws, which seem to be coming fast and furious now?

George Richardson:

Absolutely, and it's a huge part of the discussion at the governing bodies within airspace, within airline/airport relations.. So, it's very much a topic of conversation here and very much something in its infancy. But what we can say at AeroCloud is we have the ability to move a lot quicker than our legacy competitors. That has meant that the deployment and the pace that we can change, try new things, sandbox, and do other things would not be possible in the legacy way.

That's something that we've really grown to appreciate by the way that we're set up and the latest technology. We use a lot of AI and machine learning. We use a lot of complex models and a lot of decision making in our own instances that provide the airport with the ability to try trial and error for certain projects, engage with, share information with all in real time. That's something that's been a major advantage to AeroCloud and one that we look to maximize in the coming years.

David Linthicum:

It seems to me the dynamic workload need would be a key advantage. So, it's not only just flexibility to be able to change things, but airports can be extremely busy or extremely not busy, based on the time of day and the processing passengers and flights and baggage information, things like that. The processing load would spike up very few hours of the day and be down other hours of the day. Are airports taking advantage of the dynamic scalability and the ability to provision and deprovision the assets that they need to support a changing load? Are they able to find cost advantages in doing that?

George Richardson:

To be totally honest with you, absolutely not. We speak with probably a hundred airports a quarter, and that has definitely not come up at the moment. I do know that it's happening in other industries. I think what's interesting is that that would have a direct reflection on the cost of the provisioning, the cost of the monthlies, with regards to what you discussed with scalability, and the cost of the cloud, and would really come into play in much, much larger airports than AeroCloud, my business, are used to dealing with.

We specifically target airports that are regional because they are the airports that are growing as fast as we are growing as a company, and there are far more of them. We're trying to produce the amount of decisions that they have to make about the sharing of the information and make it as easy as possible for them, because the gain of sharing that information far outweighs the ups and downs that you outlined there.

David Linthicum:

How are passengers seeing this? If I'm a passenger and I'm using a regional airport, your technology is there, your expertise is there. You've changed the state. What am I noticing that's enhancing my experience to make it more productive, more enjoyable? What are not only the users, I guess, but the user's customers seeing?

George Richardson:

I think we need to start on sort of understanding what AeroCloud does. First off, we centralize all airport data into one platform that we call the Intelligent Airport Management Platform. From that platform we modularize out, whether it's baggage, flight information display systems, which is the FIDS screens that you would see as a traveling passenger, common use in passenger processing, which is the ability for multiple airlines to use the same desk to check multiple passengers in at any time and point in the day, BRS—baggage reconciliation—weight and balance, which is how many bags are on the plane, what the plane weighs, fuel predictions, passenger facility-charge predictions. Then we've also got compute division pieces inside of the airport. So, we have a complete end-to-end operating system that a regional airport will be the single source of truth.

When you accomplish either a greenfield or a brownfield deployment, and you start to own the end-to-end with a vendor like AeroCloud, shared ownership becomes a big piece as you start to integrate with either our competitors or integrate with other companies that are doing things that we are not, in the best interest of the airport. But when you understand how much data you've got, what you're collecting, and what data is of value to you, then you can start to tweak things within the airport that make the passenger experience better. In terms of cloud in isolation, in real time most of the data that we're able to collect from the sources that I just discussed and the other sources that were either binded in or getting from the FAA et cetera, and combining them into our platform, the passenger gets much better real-time information.

If the passenger gets much more, better, real-time information, they have the ability to know exactly where they stand when they are going through the various processes within the airport. That relieves passengers from worry. That relieves passengers in order to get them to spend, which is the airport's MO, the ability to extract as much money as possible from a passenger through their transition through the airport and give them a great experience. That experience is through a different jurisdiction. In the US, they are heavily weighted on security times, and processing passengers in a timely manner, to get them to the gate as quickly as possible in order to increase the experience that they have, which contributes to their local GDP. So, a better regional airport means better education, means better investment, means that people are traveling from that destination and getting a more real-world view, bringing back fresh ideas, et cetera.

An airport is truly impactful. Then we flip back onto a European-owned airport, predominantly owned by five entities. The main concern is revenue from passengers and processing them as quickly as possible to get them into the terminal to spend, and potentially also growing using AI, which we do for them to optimize their capacity, so that they know where the funnels, bottlenecks, et cetera, are within their process as they process the passenger. Those in turn increase the passenger experience. But most importantly, on the airport's behalf they're increasing their revenue per passenger. I think that's the most important thing that what we offer gives our customers.

David Linthicum:

Yeah, and you think the objective of digital transformation in general, using cloud or not, is the ability to enhance a customer experience to a point where there's an innovative differentiator as to what that experience is. You're kind of dealing with a classic business problem where there're choices. Where I live, I can go to a regional airport, or an international airport. They're kind of equidistant, but I'm typically going to choose the regional airport because there's some convenience and the experience there is better. There's fewer people, fewer flights, but if I'm able to use it in a more optimized way and get a better experience, even if I'm paying a little bit more for the flight, I'm going to make the decision.

I think we're moving into a world where that's going to be carried out not just to airports, but everything, the way in which we pick food, the way in which we pick transportation, the way in which we pick places to live. All these sorts of things really boil down to our ability to understand the customer and

provide a better customized experience, which is going to provide him or her with the ability to discern value in a particular service, in this case airports. Am I getting close?

George Richardson:

Yeah, 100 percent. Then amplified by that, a vendor like AeroCloud is solely focused on mass deployment, which is not possible obviously on legacy methods. We're acquiring customers at such a rate of knots that we are now seeing customers connected to customers. So, the next stage of AeroCloud is further enhancing the passenger experience with connecting the route that you are traveling to by owning the operating system or owning and operating the system on behalf of the airport, between the two, origin and destination, that you are flying on that route. That's really important because there's sort of ghost delays, there's confusion in gate. It gets backed up because of poor planning and staffing. That is eradicated when two airports get connected to each other, because the wealth and richness of the data that comes from the airports being on the same platform dramatically increases. And with that real-time nature.

Access to better data is giving the airports better decision making, and that in turn is increasing the passenger's experience. When you talk about the choice as you as an individual, it's something that we see an awful lot, a mass exodus to regional airports, moving away from the large hubs, just purely because they have the choice now. The rise post-COVID of the success of the ultra-low-cost carrier the fact that we're already at post-pandemic numbers, sort of pre-pandemic numbers and exceeding them in some markets is actually incredible to see, that people are voting with their feet and going for something that's much more convenient. However, this does put stresses on those regional airports that are used to processing one million that have to go to processing five million in a matter of years.

So, that's hiring. That's deploying processes, moving through an operating system like AeroCloud, and also educating the passenger on their expectation of the experience in hand. That is something that's truly interesting as regional airports start to become a lot more powerful than the hub airports, not just with the airline/airport relationship, but with the airport and customer or passenger relationship. That's where AeroCloud is definitely hanging their hat. It's a market dedicated to the regional airports that are growing much faster than the large hubs that are involving the passenger throughout the airport more.

Now that's not to say that we won't work with large airports. So, I see that in the next couple of years that AeroCloud will be at every airport in the US, for example, not just the 54-ish to 60 customers that we have today.

David Linthicum:

I think that you're absolutely right. I think that's really where it's going to be, and you guys are well-positioned to take advantage of it. So, where can we find out more about your company and yourself on the Web?

George Richardson:

We are AeroCloudSystems.com. Our main channel to communicate with potential hires, industry thought leadership, idea sharing, et cetera, is LinkedIn. We are AeroCloud Systems on LinkedIn. I personally attend all of the major conferences I would like to think that I'm extremely accessible and I've got time for as many people as possible inside of my schedule of running the business, and I'm absolutely delighted to welcome any feedback on what we've discussed, any challenges or any information more about our system and the operating system that we're putting into these airports and delighting our customers with.

David Linthicum:

I love this story. I love the fact that you guys are really getting into a niche market, probably something that's underserved and bringing the value of technology to them, so they can scale their business and also serve their customers better at the end of the day. That's why this stuff exists and that's why we talk about cloud and other technologies. So, if you enjoyed this podcast, make sure to like us, rate us, and subscribe. You can also check out our past episodes, including those hosted by my good friend, Mike Kavis. Find out more at DeloitteCloudPodcast.com, all one word. If you'd like to contact me directly, you can e-mail me at dlinthicum@deloitte.com. So, until next time, best of luck with your cloud journey. Stay safe.

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