AVIATION

FESTIVAL

Americas

Who's Who in Aviation Technology & Innovation

Amy Burr
Managing Director, Operations & Partnerships
JetBlue Technology Ventures

Hear Amy speak at the Aviation Festival Americas 2019 on Venture Innovation: Finding and cultivating innovative partners in the startup and venture sector, and integrating them into your airline and airports

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What do you think is the most interesting aviation tech project you have seen in the industry, or maybe even one you're currently working on?

Some of the most interesting work our JetBlue Tech Ventures team is looking at is the use of AI and machine learning to better analyze business platforms and processes at an airline. This could be through a next-generation revenue management system or an operations analysis that helps improve on-time performance. AI and machine learning technologies could make a huge difference on an airline's bottom line.

In your line of work, what will be the biggest industry change in the next 5-10 years?

I think some of the most impactful industry changes will be in the evolution of regional travel. Currently, a lot of major airports are at capacity with limited growth opportunities for gates and slots for smaller carriers. There's big potential to disrupt short-haul travel with electric vertical take-off and landing (eVTOL) vehicles and personal autonomous aerial vehicles. These new types of aircraft can take advantage of smaller airports and open up regional aviation networks.

How are you encouraging innovation across your teams, and have there been any barriers to that innovation?

We know it can be hard to prioritize innovation and the use of new technologies and business processes when a team is so focused on the day-to-day operations it is tasked with. But trialing new ways of doing things keeps us all innovative and energetic. Our focus is to help JetBlue teams source ideas and explore new use cases without being too distracting. Once we see value from new technologies through pilots or proof of concepts, then we can work on getting it into the queue for implementation.

How is a culture of digital interactions changing the way people interact with your airline/airport/organization?

Digitalization has transformed the entire customer experience and also the expectations. Customers expect real time, personalized, and easy experiences, and it is our job to try and meet those expectations within the construct of industry challenges.

Without choosing your own organization, what airline, airport, and/or technology provider have you been impressed by?

Air New Zealand is doing a lot of game changing work to embrace new technologies and explore innovative ways of doing business. The airline is part of our international partnership program – an ecosystem of like-minded travel providers wanting to improve the future of travel.

Robert Blair
VP, Aviation, N. America
INFORM

*Hear Robert speak at the Aviation Festival Americas 2019
on Turnaround Management: What is your data strategy
and how are you monitoring events in real-time?*

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What do you think is the most interesting aviation tech project you have seen in the industry, or maybe even one you're currently working on?
The application of AI/Machine Learning. INFORM is working on several applications that will leverage AI/Machine Learning to further enhance real-time decision-making. AI/ML "learn" on the fly making real-time adjustments to engagement standards/rules that reflect operational reality vs. models.

In your line of work, what will be the biggest industry change in the next 5-10 years?
Increases in automation and the elimination of tasks that are repetitive that can be handled by either robotics or computers. Finding that sweet spot will be critical.

How are you encouraging innovation across your teams, and have there been any barriers to that innovation?
First and foremost, we engage our customers, who are the service providers closest to the business. Our software/solutions have always been customer-driven. This model includes a willingness to invest in software development (INFORM and Customers alike) that benefits the entirety of users. A good example of this is the introduction of AI/ML into our solutions.

How is a culture of digital interactions changing the way people interact with your airline/airport/organization?
This somewhat follows our response in #2. As greater automation is introduced (and accepted by the passenger and service providers), change management is a constant occurrence. In some cases, changes are readily accepted and in others, they are less enthusiastic. As a decision-support, resource management provider, we see our solutions as a way to complement the fast-changing landscape. The changing workforce (e.g. Millennials) are technology-wise and more flexible and adaptable. They tend to not be suspicious of technology.

Without choosing your own organization, what airline, airport, and/or technology provider have you been impressed by?
It's difficult to say without excluding our valued customers as each offers their own unique services and results; however, SEA Airport is an example of a forward-looking organization. As you may know, SEA-TAC remains the fastest-growing large Hub airport in North America. Despite facility constraints, they have been able, (in part thanks to our Stands and Terminal resources solutions), to keep up with this pace, not turning away airlines. They have a very equitable gate/slot control program and have introduced European-style remote hard stands (bussing) to accommodate the increased demand. This has been a remarkably seamless process and by offering incentives for off-peak and remote stands, they have been able to accommodate new service entrants (domestic and international) for the benefit of the Seattle community and surrounding areas.

Brian Cobb
Chief Innovation Officer
CVG Airport

*Hear Brian speak at the Aviation Festival Americas 2019
on Startup Innovation: As a mid-tier airport how can you
turn to new outlets/venture for scalable solutions in the
customer journey?*

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What do you think is the most interesting aviation tech project you have seen in the industry, or maybe even one you're currently working on?
The emergence of robotics and the intrigue that they bring can't be denied. CVG is in the early R&D phases of compatibility and development. The initial approach is focusing on robotics deployments where employment needs can be offset. Employment challenges are very real and likely for the foreseeable future. It's our collective view to start trialing real-world solutions to offer assistance beyond rudimentary wayfinding by going beyond into disabilities assistance, real-time language -to include sign language-translation, transport assistance for carry-on baggage, and gate deliveries or point-of-sale options. These are optically attention grabbers for our customers that will likely further interest in our industry in beyond. More importantly, how much of the same technology can we also advance on behalf of facilities maintenance inspections through IR or LiDAR camera technologies, or onboard artificial intelligence (AI) that identifies security risks such as unattended baggage, sound triangulation, or unusual group movements.

In your line of work, what will be the biggest industry change in the next 5-10 years?
The excitement around a new array of transport modes will likely see some or all of the rapid acceleration around the introduction of pilotless passenger-carrying drone technology (Uber Elevate), the rebirth of supersonic travel (Boom Supersonic), and the routine of space tourism (Virgin Galactic). Each has tremendous implications to airports and supporting infrastructure while applying technological pressures on existing airframes and customer access.

I also fully anticipate the introduction of autonomous vehicles on and off the airfield, likely to offset the employment pressures as identified above, to support the movement of people and goods (cargo) to/from the airport. Additionally, the advancements around hyperloop could play a significant role, first with trialing cargo transport prior to the regular movement of people. In an area such as a the Midwest U.S. where rail/mass transit options are limited or non-existent, these ground-based capabilities could prove game changing for a car-centric area of the country.

How are you encouraging innovation across your teams, and have there been any barriers to that innovation?

Innovation is a daunting term. It's often viewed as the next best tech advancement. I would argue that it's a delicate balance between sourcing talent AND technology. Like many in the field, there is no lack of brilliant ideas. It's the talent that is passionate, focused, and willing to pivot that makes that brilliant idea come to life. For our team, our successes are often borne out of ideas totally unrelated to aviation, sitting at the table with those talented individuals and bouncing ideas of how the product can be pivoted into a aviation-themed solution. There's no denying the thrill and excitement when both sides strike the ah-ha moment and agree to move towards market development. Fortunate for us is our innovation architecture where we encourage cross-collaboration among our University and corporate partners to provide tangible R&D during the development process along with the opportunity for additional pivots into other non-aviation industries.

How is a culture of digital interactions changing the way people interact with your airport?

This still very much remains a work in progress, particularly for airports, when viewing it from the customer perspective. We've purposefully navigated away from 'playing' in the app space. That's not our wheelhouse. The airlines already do a tremendous job for their loyalists. Our focus is building a concierge-like approach to digitization where our data sources, predictive analytics, and myriad of airport-specific service options can be bundled and provided to our partner airlines. The mutual benefit and cross-organizational loyalty is a clear –revenue enhancement-capable- winner by providing a tailored, consistent experience based upon customer preferences. Once we mitigate the unknown factors that create air-travel anxiety (parking, check-in, security, etc.), then we can begin layering additional options that ultimately ease the anxiety, encourage relaxation, and enhance spending habits.

Without choosing your own organization, what airline, airport, and/or technology provider have you been impressed by?

There's definitely no lack of fascinating options to choose from these days. For me, I would have to lean towards the Energy sector and the increasing reach it has within every facet of everyday life. Wind generation continues to become common place. Solar is quickly becoming affordable and far reaching even for areas with low sunlight. Battery advancements have accelerated electric vehicles front and center in the automobile industry while also quickly throttling up start-ups and manufacturers to determine how battery power generation can be applied to future aircraft. And before graphene has had an opportunity to become a household name, researchers are already advancing other forms of 2D materials capable of power generation and storage.

All of these offer incredible opportunities for aviation and beyond. Most importantly, these developing renewables and sources of alternative 'fuels' have tremendous, positive implications on the environment for generations to come, presuming they continue to advance and are widely supported and encouraged.

Sergey Nikiforov
Director, Enterprise Solutions
FNT Software Solutions

*Hear Sergey speak at the Aviation Festival Americas 2019
on Digital passengers have arrived: Keep them happy - and
spending - by adapting your hub's IT infrastructure*

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What do you think is the most interesting aviation tech project you have seen in the industry, or maybe even one you're currently working on?
The new capability for Airports to engage passengers in a digital way and open up the opportunities that this brings. Instead of passengers passing through airports almost anonymously, airports are exploring new techniques to engage in dialogue with passengers and encourage trading relationships, such as commercial offers and guidance to services at the airport, that previously passengers would not have thought of or known about.

In your line of work, what will be the biggest industry change in the next 5-10 years?
The industry is inventing new ways of delivering value to the digital passenger. Biometric and location-based passenger data, instantly processed with AI and delivered as insights, will fuel the explosion of innovative digital services that will be aimed at the unique needs of each traveler. The airports will need to become hubs for digital data collection and delivery. Reimagining how customer data flows through the airport facilities will require a paradigm shift in designing and managing the underlying airport IT and Telecom infrastructure. Holistic, transparent management of the IT and Telecom ecosystems will become a requirement for all transportation hubs, hence resulting in the airports embracing the managed service provider operational model.

How are you encouraging innovation across your teams, and have there been any barriers to that innovation?
The rapid delivery of IT services through agile techniques is transforming IT service delivery to be a critical enabler for businesses. A barrier to progress is the fragmented way IT teams and users work, more in 'silos' where critical information is stored in non-transparent ways. Providing transparent business processes and information systems across the business will enable the rapid take up of new applications and accelerate digital transformations.

How is a culture of digital interactions changing the way people interact with your airline/airport/organization?
Digital transformation has changed the expectations of timeliness and quality of data, from minutes to now. Customers expect relevant information delivered at the point, and at the moment, of the digital interaction. Static information no longer satisfies the needs of the digital passenger. The expectations of digital interactions have now gone beyond those of face-to-face contacts. Hence the richness, appropriateness, and timeliness of the digital conversation is of paramount importance to all players.

Without choosing your own organization, what airline, airport, and/or technology provider have you been impressed by?
Airport organisations like Fraport are transforming passenger experiences and creating new ways for passengers to get much improved services and enjoy spending money with them.

Cesar Ahmedt
CIO
Wingo

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What do you think is the most interesting aviation tech project you have seen in the industry, or maybe even one you're currently working on?
The industry is really changing and I think one of the main projects that all the airlines are working on (also at my company) is been able to be the owners of the data and begin to view the airlines in the whole context and not only as transport providers, the must important projects are the ones that allows to the companies seeing the clients as a whole, where the relationship is for a long time.

In your line of work, what will be the biggest industry change in the next 5-10 years?
I think the biggest change is allowing a complete experience for the users and clients, and also to think as market place; so we are going to be more companies going into new channels, new ways of communication and centering more into the customer and less into the ticket, One Order is a step on that direction; this will let the companies to convert into retailers and been able to offer anyway and anytime what they are good at.

How are you encouraging innovation across your teams, and have there been any barriers to that innovation?
Our main changes are in culture side, we have been able to change our culture to be in the Management 3.0 (agile management) in order to create better units of work that focus on the user/customer and not in the process; also to allow the change using an innovation process that enhance everything; innovation is not an area or a process per se, it's a culture and a way of doing things, been able to be agile and to have and agile culture.

How is a culture of digital interactions changing the way people interact with your airline/airport/organization?
Our digital channels are the main ones and continue to be almost the only one, so all our interaction and development is under this kind of relations with the customers; one big change for our organization is been able to be the owners of that, in that matter it allow us to be more open to the changes specially for the customers and clients, but I think there are some problems with the airports relationships, especially with some service providing models that still operate with them and doesn't allow to maximize the benefits on the digital channels.

Without choosing your own organization, what airline, airport, and/or technology provider have you been impressed by?

In the Latin-American market, I think one organization that's doing the right things at the right time is Sky Airlines from Chile, they have been able to improve the independence and flexibility of the process to the customers and internal users.

For the airports I don't have one, in fact I think they haven't been able to delivery the new models needed for our market, for example the Non-Cutes options that will allow us to be more flexible to our customers.

And for providers, I think they need to give the next step, and probably we are going to see new players that are doing the things in the right way.

Aditya Chatterjee
SVP, Aero Market Segment Solutions
SES

*Hear Chatterjee speak at the Aviation Festival Americas
2019 on Connected Experience: Creating a seamless
end to end connected experience from home to flight*

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What do you think is the most interesting aviation tech project you have seen in the industry, or maybe even one you're currently working on?
Addressing passengers' demand for inflight connectivity is at the forefront of most airlines' minds right now. Passengers want the same access to their applications and entertainment in the air as they have on the ground, and are specifically looking for in-flight Internet when they're booking their flights.

Inflight technology has predominantly used satellites as its primary connectivity medium and over the last few years, various satellite operators have designed next generation satellite technologies which are "aero-friendly."

SES Networks is at the forefront of enabling the connected aircraft through our advanced satellite network. The investments we're making in high-throughput satellites and in the development of our next-generation Medium Earth Orbit (MEO) fleet, O3b mPOWER, will revolutionize the business of keeping passengers and aircraft connected in flight.   SES is building and delivering the leading global multi-band, multi-orbit network of smart, seamless worldwide coverage to enable a new era of inflight connectivity.

In your line of work, what will be the biggest industry change in the next 5-10 years?
The global population is becoming more mobile, with a growing number of air travelers coming from developing markets such as Asia and Latin America, and tech-savvy millennials representing an increasing percentage of those travelers. Going forward, it will be critical for airlines to provide broadband services to these customers, wherever they may travel, which is a key driver behind our investments in flexible high-throughput satellite technologies.

In order to support that mandate, aero-related industries will need to improve the availability and performance of in-flight connectivity services. This will be done with a combination of changes in business plans (to make connectivity for accessible and easier to use for the passengers) and the introduction of new technologies to make it easier for airlines and aircraft manufacturers to install and maintain such systems.   This enhanced connectivity will not only address passenger requirements, but enable other forms of aircraft information and control features, thereby making air travel that much friendlier.

Our fleet roadmap focuses on enabling current and next-gen in-flight connectivity services that are future proof, unique, and superior to other competitive offerings. We believe that in a new era of intelligent connectivity capacity will be allocated based on passenger demands at that specific moment, catering for both latency-sensitive and latency-friendly applications.

How are you encouraging innovation across your teams, and have there been any barriers to that innovation?
SES has always been an innovator in the satellite industry, particularly regarding our market-leading MEO service. The next generation of our MEO fleet, O3b mPOWER, takes that innovation to an entirely new level by bringing unprecedented scale and flexibility to the market. However, the technology is only part of the equation – we are also focused on working more collaboratively with our aero service provider customers and technology partners to open the door to new possibilities and an enhanced passenger experience.

How is a culture of digital interactions changing the way people interact with your airline/airport/organization?
Market studies have shown that an increasing number of travelers think more flights should offer Wi-Fi or how a rising number of passengers are bringing their portable devices on board. We are also starting to see how self-service technologies are preferred by US passengers. So, it's not surprise that by 2020 20.8 billion objects will likely be connected to the IoT, and more than half of major new business processes will use IoT in some way.

Passengers are becoming increasingly digitally savvy, and they don't want their digital experience to be cut off when they step onto an airplane. We work with our customers to enable airlines to differentiate by essentially becoming digital service providers – take Emirates, for example, which offers passengers a range of entertainment services on par with what they might be able to access in their living rooms, or Iberia, which has launched a trial of a virtual reality services on several of its long-haul flights.

Without choosing your own organization, what airline, airport, and/or technology provider have you been impressed by?
We see a vast improvement in the antenna technology for aircraft available today and it's impressive to see how the technology continues to evolve. A lot of good work has been done in the last few years. The next generation of antennas is coming fast and we're working with the leading antenna developers around the world to ensure that these antennas are suitable for our current and next-gen satellite systems.

The continuous innovation and improvements in the connectivity industry as a whole is noteworthy.   We are particularly impressed by airlines that have a desire to understand the underlying technologies which makes connectivity possible; airports that strive to connect airlines passengers seamlessly both inside the airport and in the aircraft; technology providers who passionately develop more efficient connectivity; entertainment technologies that make air travel more enjoyable; and all satellite and other capacity providers who invest in time and capital expenditure to create more and more satellites and other ground technologies that allow the airlines to better meet their customers' connectivity needs.   All members of this eco-system are passionate about creating the future of in-flight connectivity and are willing to work together as a team to make it happen.

Clyde Hutchinson
Head of Innovation
Viva Air Labs

Hear Clyde speak at the Aviation Festival Americas 2019 on Venture Innovation: Viva Air Lab - Using data and rapid testing to drive Latin America's first travel and innovation hub

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What do you think is the most interesting aviation tech project you have seen in the industry, or maybe even one you're currently working on?

The most exciting project we are working on internally is the Open Data Airlines initiative. By creating a portal, we will allow innovators the opportunity to work close to real time with airline data. We recognise this is a significant task, but we are already developing systems internally and partnerships to support making this project a reality. Our partnerships include working with Universities such as Universidad de los Andes, Bogota and Dublin City University to develop data driven projects. We see this initiative as a significant opportunity to work collaboratively to solve real issues in aviation as well as helping the industry attract the problem-solving data driven talent from universities.

In your line of work, what will be the biggest industry change in the next 5-10 years?

Airlines have had no shortage of data about so many things for a very long time. For many airlines in the past, simply storing this data was deemed a cost of doing business rather than a source of competitive advantage. We have now entered into an era where data can be used as resource to increase revenue, improve passenger experience and drive operational efficiencies. No airline has perfected this yet, but there are several who are actively moving towards this goal. Despite many of these airlines having considerably more resources than us, we want to be a leading proponent of this and drive even more effective decision making with the insights that we gain.

How are you encouraging innovation across your teams, and have there been any barriers to that innovation?

The word innovation is over-used by the big management consultancy firms who deliver presentations depicting caterpillars changing into butterflies! I prefer to call innovation "problem solving". Innovation theatre alienates staff and puts them off the design thinking or problem solving process. It is really important that initiatives like Viva Air Labs are driven by internal staff who feel they have a central role in solving problems within their organizations. When teams solve big problems, they gain even more confidence to tackle big opportunities for change, and tend to seek solutions both internally and externally.

How is a culture of digital interactions changing the way people interact with your airline/airport/organization?

Viva Air Labs has been strongly focused on developing new digital interactions, covering everything from new creative digital contact to personalization. At our launch we stated that our challenge was to develop WhatsApp as payment mechanism for passengers. In Colombia and across Latin America usage of WhatsApp to engage with business is almost the equivalent levels that we see in China with WeChat. We will continue to build on our digital platforms in a smart way, with features that genuinely enhance the customer experience.

Without choosing your own organization, what airline, airport, and/or technology provider have you been impressed by?

As part of my role I am constantly look at technology across travel and aviation. I have been really impressed by the work of Steven Greenway and his team at Swoop, the ULCC from Westjet Canada. History has shown that development of an LCC from legacy carriers has very complicated path. Swoop, whilst less than a year in operation, can be fairly seen as the premier digital first airline. Swoop have changed passenger behaviour to ensure their mobile app is the main interaction point meaning that telephone numbers aren't publicly listed. Steven has created a diverse team, combing individuals from industries ranging from retail to oil, combined with aviation industry veterans, and they have created a unique brand using data to drive outstanding travel experiences.

Miguel Leitmann
CEO
Vision-Box

*Hear Vision-Box speak at the Aviation Festival Americas 2019
on Biometrics: Creating the end to end biometric journey from
kiosks, to self-bag drop, to security, to self-boarding gates*

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What do you think is the most interesting aviation tech project you have seen in the industry, or maybe even one you're currently working on?
Seamless passenger ecosystems are defining the future of air travel. Vision-Box is proud to be at the forefront of seamless travel solutions, delivering paperless passenger experiences. Thanks to the phenomenal technology developments over the past decade, there's a growing number of initiatives inspired by the vision of a seamless airport experience: from home to the boarding gate and beyond, passengers are identified by their biometric traits; no need to show any travel documents.

While International Airports such as Sydney, Aruba, Schiphol and Kempegowda, Bangalore, are prime examples of travel hubs presenting new passenger flow models, major carriers are also taking the lead in the digital transformation of the passenger experience. Emirates, Lufthansa and British Airways are just a few examples.

At Los Angeles International Airport, for instance, Vision-Box has partnered with Los Angeles World Airports, with US Customs and Border Protection, and with large carriers like Lufthansa, Qantas, Singapore Airlines, British Airways, to introduce the first one-step multi-airline contactless boarding process in the aviation industry. Passengers are boarding their aircraft in just a few seconds, simply by looking into a camera at a self-service gateway. The system deployed by Vision-Box captures a live, high quality image of the traveler's unique biometric facial traits, matching it against the passenger's file containing the digital facial token captured at the initial immigration process.

JFK Airport Terminal One Group and Vision-Box have recently announced a roll out of facial recognition boarding. A cooperation agreement will modernize passenger processing and roll out one of the largest biometric boarding airport platforms in the USA. A self-service biometric boarding solution will be implemented in Terminal 1 to offer a more convenient, faster boarding process. Passengers will board without needing to show their passports or boarding passes.
Montevideo Carrasco International Airport is also planning to become a fully digital airport, the first in Latin America. Since 2016, the Easy Airport program has been successfully offering passengers biometric Border Control. Carrasco International is now extending the use of biometric technology to all remaining passenger interaction stages. Biometric self-boarding is already in operation, with LATAM as the pioneer carrier at the airport.

These are just some examples of landmark programs that Vision-Box has been working on. We are excited to be front runners in the digital transformation of airports and introducing seamless travel as the best option for passengers around the world.

In your line of work, what will be the biggest industry change in the next 5-10 years?
Without a doubt, digital identity and the subsequent transformation of airports into seamless ecosystems.

The use of biometrics for a safer, more secure, and efficient method of passenger identity authentication is becoming the standard by which airports operate. Airports and airlines are massively adopting seamless, on-the-move and contactless processes, and this will quickly go viral to include retail operations and branch services. Interactions like requesting permission to drop a bag, making a payment or clearing the border, will be completed just using biometrics. The whole airport experience will be digitized, with the future seeing passengers being greeted by AI avatars.

As the digital transformation advances, airport management is also inevitably changing, becoming more data driven and collaborative. Airports and airlines are adopting digital identity management platforms that connect all touchpoints, data sources and travel actors (airlines, airports, airport agents, border control authorities, retail partners and passengers). Digital Identity Platforms are a must-have to expedite passenger flows, induce positive experiences and generate revenue growth.

As seamless is introduced to more airports around the world, they will connect with each other and allow travelers to pass through different airports and countries without the use of travel documents. This will transform the working relationships between national and international agencies, airports, and border control points. Seamless experiences will shift the passenger journey from a point-to-point approach to a fully connected one. For this to happen, agencies like ICAO, IATA, ACI, and WCO must work together to finalize the definition of the standards and new regulations on Digital Travel Credentials. This is pivotal to liberate the use of Digital Passports and further promote the adoption of Biometrics and risk-based assessment models towards more efficient processes and seamless travel.

How are you encouraging innovation across your teams, and have there been any barriers to that innovation?
Vision-Box's DNA is about nurturing a culture of collaboration and innovation. This is stimulated to the inside-in and out of the company: with our clients, working together, combining visions, knowledge, learnings and successes. We have been opening several Innovation & Excellence centers recently, in Miami (US), Aruba (Caribbean), Bengaluru (India), , and most recently, in Porto (Portugal). Those centers promote a much-needed closer exchange between all the stakeholders of our ecosystem

Innovation is a process generated by human talent, so we hold frequent "Open Day" innovation events and have just launched a new trainee program, an important step in assuring the influx of new talent and fresh ideas.

Vision-Box works amid a highly dynamic and transformative aviation business model. Disruptive ways of thinking are needed to challenge the status quo. Relying on old ideas is not the way to evolve. We aim at making the world a better and safer place, fully dedicated to Seamless Experiences for Connected Travelers. This is taking the company to new technology heights and boosting Vision-Box's reputation as an innovative market leader. So far, the only barriers we've encountered are related to growth challenges and to the adoption of standards to cope with the progress. Our seamless technology is highly sought out and we make sure we work hard to deliver a unique solution that fits the very specific needs of each customer, whilst leveraging necessary standards frameworks, and established best practices, to sustain scalability and resilience.

How is a culture of digital interactions changing the way people interact with your airline/airport/organization?
We are in business to completely change the way the passenger perceives and approaches an airport. As important as they are, human interactions at the airport will no longer be repetitive and time-consuming. With self-service digital process coming into play, the passenger will be in the driving seat of his time, his identity, and the information he/she provides.

A groundbreaking vision of an end-to-end passenger experience that is seamless, efficient and secure, offering passengers a frictionless airport process, is taking shape. Following IATA's OneID program, which promotes the possibility to walk through the airport without breaking stride, the Digital ID makes everything simpler. Passengers must no longer constantly juggle their belongings to show documents at each single checkpoint in their journey. Now they can allow to share only the necessary clearance traveler information. The passenger, and the ID data associated to him, are connected all the time, as communication, feedback and immediate action to cater to the passenger's requests happens online. The passenger becomes the real center of the whole travel ecosystem, under strict compliance to data protection and privacy legislations.

Although bearing in mind that the benefits of a robust Digital ID system shall not be exclusive to the aviation industry, Vision-Box brings to the table a future-proof Identity Management As a Service (IDMaaS) platform which connects the various pre-departure, departure, transfer and arrivals processes, including the return trip – both in international and domestic travel. The passenger data is collected, admissibility is assessed, and identity is confirmed as early as possible in the process, and is subsequently shared, used and amended by all stakeholders.

Governments of the modern world will increasingly offer and consume IDMaaS platforms, as they will truly enable the global movement of people, within in a risk-controlled environment and delivering economic benefits back to society.

Without choosing your own organization, what airline, airport, and/or technology provider have you been impressed by?
We are particularly impressed with some major gateways to the America's. Montevideo Carrasco, Los Angeles, and JFK International Airports are making important leaps forward to improve the passenger experience. They are giving over 150 million yearly travelers exactly what they want: an easier airport journey, less congestion from check-in to boarding, and more information at the distance of a click.

The three airports are integrating cutting-edge biometric technology, from recognition, self-service touchpoints, and orchestration platforms. Passenger journey is now walking towards a seamless couch-to-gate experience at those travel hubs.

The mentioned airports recognize the importance of these technological progresses to remain competitive now and for years to come. By anticipating their passenger's needs, they are taking a proactive approach into shaping the future with seamless experiences for modern-day connected travelers.

Dawn Gregory
Innovation Management Officer
Hartsfield Jackson International Airport

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What do you think is the most interesting aviation tech project you have seen in the industry, or maybe even one you're currently working on?

As the aviation industry evolves, emerging technologies abound. It is an exciting time. We see emerging innovations across the ecosystem; from the role of wearable devices in flight-related functions, to drones used to visually inspect for damage to a plane's exterior, to augmented reality shopping experiences, to robots parking cars.

The trend across the industry that intrigues me most is the movement to transform airports for the future, and position them as beacons for regional economic growth. Airports are playing a larger role in Intelligent Transportation Systems (ITS), and are integrating into a seamless transit experience for passengers. Hartsfield-Jackson Atlanta International Airport is leading the way to create a frictionless, and effortless experience from parking to gate. We are using a consumer-driven, data-informed approach to reduce wait-times, optimize amenities, and provide real-time wayfinding while offering award-winning concessions.

In your line of work, what will be the biggest industry change in the next 5-10 years?

Urban Air Mobility (UAM) introduces a new era in air transportation, and will require both airports and airlines to rethink their business and revenue models. As parking income dwindles, airports will experience greater pressure to explore the financial opportunities related to UAM. Tomorrow's consumers will expect on-demand, customization, and real-time capabilities as the new business norm. Stakeholders across the industry must embrace this, and incorporate it into their planning.

How are you encouraging innovation across your teams, and have there been any barriers to that innovation?

At Hartsfield-Jackson, we define innovation as the process to cultivate and transform ideas into outcomes that deliver value across three domains: operations, finance and customer experience. Innovation is everyone's responsibility, and we value ideas from our teammates. Last year, we launched our first cross-functional design-thinking session focused on improving the travel experience. We even incorporated a training session in our internship program. In an operationally-intensive business, I found that once we developed a foundational definition for innovation that everyone understood and embraced, we overcame our greatest hurdle to progress.

How is a culture of digital interactions changing the way people interact with your airline/airport/organization?

The digital world is inescapable. It has transformed the way the airport unifies online and offline communications with our passengers. People no longer look at airports as just a means to get from Point A to Point B. Their standards are higher and so are their expectations of air travel. Passengers desire to manage the entire airport experience from the palm of their hand, how they want it from the moment they check-in for their flight, to security screening, to real-time updates in between. The airport's success is not about the deployment of emerging technologies, but implementing impactful technologies that drive objectives and goals. It requires a delicate integration between existing and new technologies that evolve our processes and services to deliver better customer experiences. Hartsfield-Jackson Atlanta accepts the challenge to deliver efficiency in a virtual environment, as it has in the physical. We are No. 1 for a reason.

Without choosing your own organization, what airline, airport, and/or technology provider have you been impressed by?

Last year, Delta Airlines implemented the first curb-to-gate biometric international terminal experience, using facial recognition technology. This inspiring feat provides passengers the option to leverage this biometric option for all parts of their journey. Delta propelled the industry into the future – something previously only thought possible in the movies. This initiative not only marries innovation with seamless customer experience, but also saves time.

Goutam Kundu
CIO
Metropolitan Washington Airports Authority

Hear Goutam speak at the Aviation Festival Americas 2019 on Entry/Exit Biometrics: Should airports outsource technology or develop a culture of in-house solutions and innovations?

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What do you think is the most interesting aviation tech project you have seen in the industry, or maybe even one you're currently working on?
Managing and authenticating the passenger's identity throughout their journey is a key area of focus for commercial aviation. It underpins the entire passenger journey, during which the passenger will interact with multiple stakeholders, and each interaction relies on the assertion of the passenger's identity. Historically, this has translated to a cumbersome, time-consuming process for passengers due to layers of legacy technology, organizations, process and regulations. First generation solutions have made great strides in improving the speed and ease with which passengers pass through airports, while the emergence of next-gen biometric identity solutions that accurately and quickly match a single facial image has the potential to transform the convenience and security of air travel for all stakeholders.

In your line of work, what will be the biggest industry change in the next 5-10 years?
The challenge of enabling sustainable growth and managing rising demands and new entrants in air travel. This will require not just new technology, but new means of collaboration and new processes. Identity management innovations, in particular, will impact all stakeholders. By working together, and addressing existing inefficiencies, the industry can deliver benefits for passengers, governments, airlines and airports.

How are you encouraging innovation across your teams, and have there been any barriers to that innovation?
To encourage innovation, we foster creative ideas from all staff by making time for brainstorming, actively soliciting ideas, and not being afraid to challenge the ways we work. Just as importantly, we tolerate and value mistakes as a learning experience.

Challenges to innovation have related to articulating and fostering the shared innovation vision at a company-wide level. We constantly work to communicate innovation as a company-wide commitment through education and collaboration.

How is a culture of digital interactions changing the way people interact with your airline/airport/organization?

Passengers expect integration in both the digital and physical aspects of their time at an airport. For example, a passenger's identity is traditionally asserted by an individual examining printed travel or identity documents. Yet that same passenger is often using their phone to display a digital boarding pass. This incongruence is only exacerbated by the lack of coordination between the different stakeholders, all of which ensures a poor and repetitive customer experience. As the industry moves to a truly modern identity management platform, opportunities to automate identity verifications, protect the customer's identity, and enhance the overall experience will begin to bear fruit. But this can only happen if the current, increasingly outdated set of rules and responsibilities are reviewed, and a new trust framework can be agreed upon by all the parties involved.

Without choosing your own organization, what airline, airport, and/or technology provider have you been impressed by?

Many of the leading airports in the world have embraced both the opportunities and challenges of developing a modern, integrated identify system. A system where boarding passes, identification checks, and inefficient queues are eliminated. The Metropolitan Washington Airports Authority is excited and inspired by those airports willing to push for something better and we join them in creating a better experience for all stakeholders.

Juan Ivan Martin
Head of Digital Finance
IATA

Hear Juan speak at the Aviation Festival Americas 2019 on Artificial Intelligence: How can machine learning and AI be applied to revenue management?

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What do you think is the most interesting aviation tech project you have seen in the industry, or maybe even one you're currently working on?
The Aviation Industry has been at the forefront of innovations for decades with great benefits for the billions of passengers that fly safely around the world. The simple fact of flying is a "tech" that just turned 100 years in 2014. Ever since the first commercial flight the technological enhancements are very noticeable with faster, safer, cleaner, silenter and cheaper flights. In the latest years many projects are looking into building new capabilities enabled by lasts digital advancements like Big Data, AI, AR/VR, Sensors, Biometrics, Blockchain, etc. Probably the one with most tangible benefits to passenger is the increase of connectivity onboard. Indeed, the advent of connected aircrafts is enabling many new opportunities both for the cockpit and the cabin that will transform the way we travel in the near future.

In your line of work, what will be the biggest industry change in the next 5-10 years?
We are currently in the middle on the Data Revolution. In the next years our airline has an opportunity to transform customer experience and to achieve great operational efficiencies with the correct control of data and Digitalization. Data becomes the new Oil.

How are you encouraging innovation across your teams, and have there been any barriers to that innovation?
Innovation is a buzz word. Everybody uses it in chats, meetings and presentations. There is an enormous difference between talking about it and actually doing it.

It takes a village to change the innovation culture of a company and probably a country to change an entire industry. Resistance to change is human and in risk adverse industry as ours, you don't simply change things without a burning platform. Too often I hear "If it isn't broken, why fix it?", which is precisely what makes us prone to disruption.

How is a culture of digital interactions changing the way people interact with your airline/airport/organization?
Historically airline/airport/organization interactions were bilateral exchanges of paper documents. With the advent of computers, we moved to flat files that helped digitizing our industry (Less "dirty finger prints"). Nevertheless many players in the value chain still use heterogeneous systems and batch-processes that hinder us from enabling real time data sharing.

We are now moving into digitalization with a strong Industry Data Model, fast penetration of Open APIs and the construction of industry platforms for more effective and secure data sharing.

Without choosing your own organization, what airline, airport, and/or technology provider have you been impressed by?

There are many players doing great achievements within our industry. Some airlines and airports are often on the news as first movers in specific technologies and use cases. It's great to see many trying to make commercial aviation a better industry.

However, for me the "Wow!" factor within Air Travel often comes from outsiders. When I see what Amazon does with last mile parcels using drones, robotics, zeppelins, etc. it's simply amazing! When I look into Google Loom or Facebook Solar drones trying to breach the Digital Divide in the World I'm profoundly inspired! When I see Mr. Elon Musk reinvesting his fortune in space traveling or trying to create a fully electrical takeoff and landing plane, I can only take my hat out!

We truly live in exciting times!

Kassandra Anglin
Manager, Enterprise Risk Management
Southwest

*Hear Kassandra speak at the Aviation Festival Americas 2019
on Crisis Management: A view from the lens of operations,
security, reputation, and risk*

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What do you think is the most interesting aviation tech project you have seen in the industry, or maybe even one you're currently working on?
AI technology for facial identification

In your line of work, what will be the biggest industry change in the next 5-10 years?
Business capabilities (cost savings solutions)

How are you encouraging innovation across your teams, and have there been any barriers to that innovation?
We have a dedicated innovation team that seeks for innovative solutions, we also host events to inspire innovation. The biggest barrier is to ensure we do not introduce risk when innovating.

How is a culture of digital interactions changing the way people interact with your airline/airport/organization?
The growth of IoT devices, has allowed people and companies to be more connected. More information and insight is available today than it has ever been before. Through IoT devices airlines can deliver better customer service, and airports can better cater to customer needs.

Without choosing your own organization, what airline, airport, and/or technology provider have you been impressed by?
Delta Airlines – biometric terminal in Atlanta

Lio Chen
SVP Travel & Hospitality
Plug and Play Tech Center

Hear Lio speak at the Aviation Festival Americas 2019 on Venture Innovation: Finding and cultivating innovative partners in the startup and venture sector, and integrating them into your airline and airports

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What do you think is the most interesting aviation tech project you have seen in the industry, or maybe even one you're currently working on?
Running an accelerator program with a single focus of corporate innovation provides a unique vantage point of both tech projects that are ready to go and more futuristic technologies that are due for commercialization in 3-5 years. As an example, amongst those near-term projects, Assaia is an AI/computer vision startup that we are quite excited about in terms of its capability of tracking and measuring gate turn efficiency. On the other hand, Koniku, an IoT company, is building a more futuristic neuron-based computer chip that can be used by airlines and airports to make their security systems more accurate and efficient in identifying possible threat.

In your line of work, what will be the biggest industry change in the next 5-10 years?
The industry will go through the next phase of digital transformation with both hardware and software tech to better address seamless journeys and passenger experiences.

How are you encouraging innovation across your teams, and have there been any barriers to that innovation?
The aviation industry, as a whole, is risk averse. Being an accelerator, that serves common interest across multiple airlines and airports, requires us to foster a culture of open innovation that complements proprietary R&D as well as promoting incremental innovation just as much as disruptive innovation.

How is a culture of digital interactions changing the way people interact with your airline/airport/organization?
According to Pierre Nanterme, Former CEO of Accenture, digital is the main reason just over half of the Fortune 500 companies have disappeared since 2000. Given the wider adoption of digital interactions, we see rising interest and participation of leading companies in the startup ecosystem, creating CVCs and/or playing an active role in open innovation.

Without choosing your own organization, what airline, airport, and/or technology provider have you been impressed by?
Delta Air lines, AirAsia, JetBlue, Manchester Airports Group and Changi Airport Group.

Sarah Wittlieb
VP of Innovation & Creation, LabCampus
Munich Airport

Hear Sarah speak at the Aviation Festival Americas 2019 on Venture Innovation: Finding and cultivating innovative partners in the startup and venture sector, and integrating them into your airline and airports

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What do you think is the most interesting aviation tech project you have seen in the industry, or maybe even one you're currently working on?
I am relieved to see that during the last five years our industry started to focus on innovation management and find own solutions for megatrends like digitalization.

The aviation and furthermore the whole mobility industry can learn from other industries and companies like Google or Tesla. It´s not about the product or services they develop, it`s about their innovative and open minded work culture and team atmosphere.

Concerning Munich Airport I am so grateful that our C-level took the decision for a totally new and innovative business model for our airport – LabCampus: an open innovation cross-industry campus with a seize of 83 football fields located directly at Munich Airport.

Our aim is to connect companies from different countries and various industries in order to collaborate in creating new innovations and products – in order to find solutions for their business models of the future.

In your line of work, what will be the biggest industry change in the next 5-10 years?
To my opinion the biggest industry change already started. Airports and airlines need to find new business models, e.g. due to revisions of statute amendments, rapidly changing new technologies and a changing customer behavior.

Consider for example the retail business in times of e-commerce or your parking business when tomorrow`s customer could arrive with an autonomous driving car or even a hyperloop. New technologies like IoT or AI will have a crucial impact on our processes at airports and airlines and we should consider now how we deal with them and how we could use them for improvement of efficiency or new business models.

How are you encouraging innovation across your teams, and have there been any barriers to that innovation?

Like in most companies with a long history and story of course there are barriers. In every large organization you will always find some "employee personas" who are not the biggest friends of changes, failures - and they are huge and many in the innovation process – and trials. The question is how the management is challenging and promoting innovators and talents who have the courage to create and realize new ideas – including several failures in the process. At the Airport we started an innovation ambassador circle – where open minded and forward thinking characters meet once a month to discuss new trends and find solutions for the airport, how to translate them for the own unit, processes or business model.

In my own department at LabCampus I have an open door policy – not only in terms of my office but concerning new ideas, own project responsibility for my colleagues and also criticism.

How is a culture of digital interactions changing the way people interact with your airline/airport/organization?

First of all, I am very happy that people still travel in order to meet each other in person and live – this is the main core of our aviation business. Digital interactions like communication channels (whats app, Instagram, we chat…) can be important assistants for product marketing, brand management or personal communication and information about your flight etc.

I would differentiate between open digital interactions like social media etc. and "behind the scenes" digital interactions like for example the just in time luggage process driven by an internet of things platform. The real-time interaction can help the customers to experience seamless travel and get the customized offers in the right situation whereas many for customers hidden interactions help to improve the aviation processes.

Without choosing your own organization, what airline, airport, and/or technology provider have you been impressed by?

I am very impressed by Virgin Hyperloop One. To my opinion Richard Branson and Virgin invested in a new technology that will change the way we travel and will have an impact on cargo logistics as well.

Of course our business models will be directly affected by innovations like the Hyperloop Technology, but rather than ignoring or blocking new solutions we should collaborate and co-create innovations, our company will benefit from as well.

Tania Hoque
Manager, Mobile Strategy and Emerging Technologies
WestJet

Hear Tania speak at the Aviation Festival Americas 2019 on Chatbots: How are you leveraging chatbots to ease customer interaction, save on resources, and when is human interaction crucial?

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What do you think is the most interesting aviation tech project you have seen in the industry, or maybe even one you're currently working on?
Baggage tracker - although it may not seem groundbreaking; the value it provides is incredible. As a traveler myself, in almost all the my flights I am concerned whether my bag will reach on time without being mishandled - especially when there are multiple connections. The same is the case with everyone else. The tracker is a complete stress buster where it tells you at what time its being loaded or unloaded releasing the tension and anxiety that travelers experience. The other exciting project that I have come across that some airlines are looking at, is using AI to predict what destinations and prices should be offered for specific markets, find distribution channels and manage yield to remain competitive and customer friendly. This is a workforce multiplier as airlines rely on the system to crunch the numbers and save on planning and reshuffling costs.

In your line of work, what will be the biggest industry change in the next 5-10 years?
Undoubtedly the use of emerging technologies such as AR, VR, AI, IoT etc. And its not just the airline industry, the new wave of technology will disrupt every industry that we know of, sooner or later. Its not developing or introducing new technology for technology sake, but we could be solving decade old problems and finding new solutions quicker with these emerging technologies. The airline industry is already in the initial stages of this transformation; and it would be fair to say the transformation will happen so rapidly that consumers will see themselves using these before they even realise.

How are you encouraging innovation across your teams, and have there been any barriers to that innovation?
We are encouraging innovation by giving our WestJetters a platform to present and share their ideas, regardless of where they stand in the company. This is important as many a times WestJetters who are close to the problem know what the best solution would be; as opposed to their leader for example. More than barriers, I think the challenge we have in traditional companies is the mindset that digital is there to support strategy. To be truly innovative and competetive in today's world, Digital should be at the forefront of strategic planning; as the fact of the matter is everything that can be digitized will be digitized. And if you are slow; someone else will get there before you.

How is a culture of digital interactions changing the way people interact with your airline/airport/organization?
We are increasingly dealing with travelers who have grown up with cellphones in their hands; and experienced travelers who would like to have more control of their journey. Today travelers expect to get updates in real time via notifications and more intuitive and seamless experience. They expect relevant content and suggestions as opposed to being bombarded with information that will be of no use to them. With data and privacy laws, we are working on ensuring we are giving the right experience at the right moment without being intrusive or "creepy".

Without choosing your own organization, what airline, airport, and/or technology provider have you been impressed by?
Undoubtedly Amazon for the obvious reasons. It may not be too long before they start their own passenger planes, you never know.