The Future of Travel



Index

| Why the Small Tech Startup is The Next Big Thing for Travel Companies | 1 |
|--|----|
| Top 10 Travel Startups to Watch in 2019 | 4 |
| The Future of Travel: And Why It is Big, Bright and Personal | 7 |
| A deeper look into these amazing startups | 20 |
| At Plug and Play We're Disrupting Travel. And This is How We're Doing It | 24 |
| Traveling the Road to Disruptive Growth | 31 |

Why the Small Tech Startup is The Next Big Thing for Travel Companies

At Plug and Play, we connect the largest corporations to the world's best startups through industry-focused programs in Silicon Valley and around the world. We're in a unique position to see what early-stage disruptors are focused on, and how established firms are responding through internal innovation and external investments.

And that's why we have created a collection of articles that highlight the emerging trends in travel and opportunities where corporates and startups are collaboratively pushing the envelope to create the next wave of innovation and growth.



Big Corporates Are Great at Failing at Innovation

Travel and hospitality account for 10% of employment worldwide, and it is estimated that the sector contributed \$8 TRILLION to the global economy in 2017. Not only that, according to PhocusWright, the travel tech sector has attracted a large amount of venture capital funding, raising over \$19B+ since 2008, excluding ride-hailing and bike sharing companies. It is a large, fast-growing industry tied directly to global consumption growth, and with populations increasing and incomes increasing, the demand for travel products and services will only increase.

But there's a problem. With all the startups hoping to IPO or get acquired, and all the big corporate travel companies looking to snag the hottest new company before it gets big (or becomes a competitor), there's a surprisingly high failure rate when it comes to corporate innovation. It's hard for established players to identify which startups will succeed and which will fail, not to mention figuring out how to innovate inside their existing models.

Consider the Marriott TestBed Incubator, which lasted for only one year and then was replaced by The Travel Experience Incubator, costing Marriott a fortune generating little innovation buzz.

Or the Disney Accelerator, which partnered with Techstars in its early days, only enrolled 7 companies for its 2018 batch and saw very little press coverage for any of its activities. The need for innovation within big companies is clear, but few corporate travel accelerators have come up with the right formula to drive real innovation.



The startup disruptors need help too. While innovative products and solutions may come naturally to small startups, scaling up in an established market is challenging. More and more startups now seek opportunities to partner with incubators that don't just help them refine their business plans but actually connect them with corporate customers and partners. "The travel and hospitality industry as a whole has taken a lot of criticism for its inability to drive innovation from within," said Lio Chen, Managing Director of Plug and Play Travel. "On the other hand, with the exception of a few homeruns, travel startups had not received much attention from VC investors due to lackluster returns." "The travel and hospitality industry as a whole has taken a lot of criticism for its inability to drive innovation from within,"

Lio Chen Managing Director of Plug and Play Travel

Top 10 Travel Startups to Watch in 2019

When Airbnb was founded in 2008, few industry professionals thought that the company was anything more than a flash-in-the-pan. Now, 10 years later, Airbnb has transformed the travel and hospitality sector and redefined how an entire generation approaches travel.

Airbnb redefined "hospitality" within the overall travel experience while challenging the traditional hotel and lodging experience. So how can big corporations avoid getting "Airbnb-ed" in the future?

Don't get "Airbnb-ed" by the next travel & hospitality unicorn

While some travel players go it alone like Marriott or Disney, others recognize the value of joining established innovation ecosystems. Jumping into a network where partners, entrepreneurs, Venture Capital Investors, and high energy events catalyze new thinking and opportunities helps overcome the corporate inertia that stifles innovation.

The travel startups you should be watching

Corporates that want to stay ahead of the market must keep a close eye on which startups are gaining market traction – both directly within and adjacent to the travel and hospitality industries. Similarly, early-stage startups should look to the disruptors in the space for inspiration and insights into what it takes to be successful. Here are 10 startups making waves and getting big investor valuations:



Klook

Klook is Asia's largest in-destination travel services booking platform. It has raised a total of \$500M in funding over 5 rounds.



Traveloka

As Indonesia's travel unicorn, Traveloka is the no. 1 solution in Southeast Asia for all travel needs, including flights, hotels, trains, buses, car rentals, restaurants, etc.

ADARA

Adara

Adara works with the world's largest airlines, hotels and rental car companies to fuel their personalized messaging and relevant offers by stitching together millions of unique traveler profiles and proprietary travel data globally.

AWAY

Away

Away is a travel accessories brand selling high-end smart luggage direct to consumers for a low price. It recently raised another \$50 million to drive





TripActions

TripActions is a corporate travel management company which recently raised \$154 million in VC funding at a \$1 billion valuation.



GoEuro

GoEuro is a multi-mode search tool that enables travelers to compare and book rail, air and bus to anywhere in Europe with one simple search, in one place on mobile, app or desktop. They just raised a new \$150 million funding round.



TravelPerk

TravelPerk helps businesses manage travel for free. They have raised over \$70 million in VC funding.



Evaneos

Evaneos is a web platform helping travelers design, estimate the cost, and book personalized multi-day trips by connecting them with local agents. This French startup recently closed a \$80 million round.



Hopper

Hopper is a mobile-only travel app which uses AI to analyze billions of prices daily to predict how prices will change and tells you whether to buy or wait. It recently raised \$100 million in funding and is valued at \$780 million.



0Y0

India's largest hospitality startup which operates a network of budget hotels. The company was founded in 2013 by 18-year-old Ritesh Agarwal and has now raised more than \$1.5 billion from the likes of Sequoia Capital and Softbank.

The Future of Travel: And Why It is Big, Bright... and Personal

So where is the Travel and Hospitality space headed? Though it's impossible to predict the future, the industry's growth is being driven by an increasing number of travelers making more frequent trips and adapting to an increasingly globalized economy.

According to a 2017 study published by Google and Phocuswright, 57% of travelers feel that brands should tailor their information based on personal preferences or past behaviors. Not only that: consumers may also be more willing to pay premium for that personalization. In that same survey, 36% of travelers said they would be likely to pay more for travel services if a brand tailored its information and overall trip experience based on personal preferences or past behavior.

The competitive landscape of the travel and hospitality industry is in a constant state of flux. The size of the market and the highly segmented nature of the sub-sectors complicate things even further. Traditionally, large multinational suppliers like hotel chains and airlines held a strong position in the marketplace. In recent years, online travel agencies (OTAs) began to dominate the marketplace for travelers looking to get the best deals on airlines and hotels and packages. Now, as technology becomes more advanced, accessible and affordable, suppliers and travel startups are again gaining traction in the travel space.

Whether through alternative accommodation platforms like Airbnb designed to provide a different user experience to customers, or through the adoption of machine learning and big data analytics to streamline back-end processes to improve functionality and profitability for suppliers, travel companies are becoming increasingly more creative in finding new opportunities for growth and differentiation.

Funding the Future of Travel Through Greater Knowledge

Support for the travel and hospitality sector comes from all sides, but the smart money comes from those "in the know". Venture capitalists, arguably some of the most "in the know" people out there, continue to pour money into the sector with little sign of slowing down. Should corporates and investors be scared by the prospect of a bubble, or should they be looking to paddle like hell just in time to catch the next big wave?



While we at Plug and Play feel bullish about the future of the travel and hospitality sector, we're careful to make sure we aren't blinded by Shiny Object Syndrome. To make sure we don't miss out on any warning signs present in the market, we keep an ear to the ground for what other investors are saying about the sector. One of these is the VC firm Thayer Ventures, focusing exclusively on travel and hospitality technology.

"We are seeing a convergence of forces coming together in the broader industry," said Chris Hemmeter, Managing Director of Thayer Ventures. "Suppliers are embracing innovation and experimentation like never before and are becoming increasingly fixated on the entire guest journey. The old silos of planning, booking, experiencing and sharing are converging into a seamless continuum of activities. This shift in supplier perspective and traveler demands is stressing the old tech stack and creating a broad range of entrepreneurial opportunity."

Funding for startups in this space continues to be strong, particularly for technology providers that offer a solution to provide experience to travelers while offering more flexibility in an industry that has traditionally been resistant to change. "Travel executives are demanding greater flexibility from their tech platforms and are finding, much to their frustration, that legacy investments are stubbornly rigid. As they address this problem, they are also looking to startups for the next generation of solutions that attack a wide range of opportunity along the traveler journey" said Hemmeter. "Our thesis is that this trend is just beginning, and that great value will be created by emerging companies as they address these issues using new capabilities like AI." Ultimately, the businesses that will be most successful in this sector will be those that continue to build applications that solve true business problems.

Trends in Travel: Where Is The Industry Headed As You Read This

When looking at the travel and hospitality industry, many of the megatrends we see emerging are like those in other adjacent industries. Companies are seeing value in producing more tailored and personalized experiences for customers, while simultaneously improving the way in which they deliver products and leverage efficiencies. Travelers are also being influenced by the way companies are growing more responsive to their needs, which in turn is driving demand for greater and greater levels of customization and personalization.

Here are five major trends we see for 2019

- New Frontiers: Advances in technology will put space-travel and deep-sea tourism within reach for travelers like never before.
- Social Consciousness: Activities and events that promote social awareness and cultural diversity will grow in number.
- Environmental Sustainability: Sustainable travel experiences that have low impact on the environment will become more popular.
- Medical Tourism: People will be more willing to travel for low-cost, high-quality medical care in other countries.
- Instagrammable Solo Travel: More and more people will travel solo or as part of travel groups, while promoting their adventures on social media.

These are the main trends that we see. But let's go bigger:

Travel mega trends that are here to stay

Four key mega trends will continue to shift and shape the travel space.

Personalization

Personalization has become incredibly important to travel and hospitality businesses in recent years. Today, lots of data exist, but it's collecting dust. Many of the startups we see are looking for ways to bridge the gap to provide greater personalization for travelers while simultaneously providing data to help companies better understand their customers.

It's no longer acceptable to market the same offers to two different customers when their travel patterns are completely different. Online Travel Agencies (OTAs) have started leveraging technology to allow for more personalization, while many hospitality brands and airlines are lagging behind.

New technologies being developed by startups and corporate innovation groups are now becoming more easily accessible and will start to change how suppliers interact with and personalize experiences for their customers.

Ancillary Revenue

Ancillary revenue is any type of revenue that comes from a non-core part of the business. For airlines, this might include seat upgrades, in-flight meals, or baggage and in-destination services. For most large corporations, ancillary revenue is integral to profitable growth and competitive differentiation.

Hospitality brands like Accor Hotels are focused on exploring opportunities outside of lodging and food & beverage that can complement their customers' experiences while increasing wallet share. Because Accor knows when their guests are arriving and leaving, they can look at ways to add value in-between through delivering complementary experiences like dining, ticketing, and other services. A focus on Ancillary Revenue pushes the core business model since it often requires new partnerships, like JetBlue offering its flyers rental car services.

NDC (New Distribution Capability)

In simple terms, NDC started as a set of technical standards, which gives airlines the ability and flexibility to distribute contents through third parties. With the backing of International Air Transport Association (IATA) since 2012, NDC has been gaining a lot of momentum and debated as a GDS killer for much more sophisticated airline retailing, including dynamic packaging, up-selling and cross-selling.

With Sabre's latest acquisition of Farelogix, a pioneer in NDC-enabled solutions, innovation in the distribution business is expected to be a leading trend for the airline industry in 2019, pushing airline retailing beyond selling seats and baggage services.

Greater Efficiency & Better Customer Experience

Companies that can operate with greater efficiency while simultaneously offering an improved customer experience will leap ahead in building robust business models that drive revenue growth. But aren't these two things at odds? New technologies will allow companies to process more information in less time, while simultaneously giving travelers a more seamless experience.

For example, Artificial Intelligence (AI) and machine learning will increasingly be used for both customer-facing services and internal services.

How's Technology Fueling Innovation in Travel

At Plug and Play, while our corporate innovation platform strictly focuses on B2B initiatives, we recognize the risk of becoming enamored by technology. Technology is simply a tool to help serve customers better and improve business efficiencies. This requires looking at technology with a holistic perspective to determine what the best tool in the toolbox is to solve the business problem at a specific moment in time.

Here are six major technologies that are currently changing the face of travel:

Blockchain for Payments & Improved Customer Service

The travel and hospitality sector is notoriously segmented, meaning that data is often incredibly difficult to share effectively between different suppliers, customers and end users. In a world that is becoming more digitally interconnected than ever before, safety, security, and the seamless flow of information between parties is becoming paramount.

That is why blockchain is expected to become a key technology for companies looking to shift the travel and hospitality sector.

Blockchain as a technology can be invaluable in business models in which many stakeholders need to trust data provided from other users. This makes it perfect for the travel sector, where it is already being used by several travel startups to disrupt entrenched players such like OTAs and to ease partnership and program integration throughout the entire travel ecosystem.



One prime example is the startup Arise, which offers a blockchain-based distributed network that enables hotels to work with anyone that wants to sell hotels rooms with confidence. Hotels get to set commission rates and whoever sell those rooms will earn the set commission amount and receive commission payouts automatically based on smart contracts.

Loyyal is also upending the way in which loyalty points are earned and redeemed, empowering travel companies to extend their partner networks more securely and effortlessly. As a universal loyalty and rewards platform built with blockchain technologies, Loyyal is designed to extend and enhance legacy loyalty management systems without necessitating a wholesale change.

Artificial Intelligence

Researchers began exploring Artificial Intelligence (AI) in 1956. Today we are at a point where technological advances and the lowered cost of computing power have allowed for AI to enter the mainstream.

Platforms like IBM's Watson and TensorFlow, Google's artificial intelligence engine, are making developing AI tools inexpensive and more manageable than ever before. Because of this push towards open source, the growth of AI is set to change the way travelers and employees working within the travel and hospitality sector interact and engage with one another, especially when it comes to deciding how to optimize a specific travel experience. The value of AI has been seen by organizations and by travelers.

For example, according to Google's Vice President of Engineering for Travel and Shopping, Oliver Heckmann, nearly 60% of consumers say they believe the Google travel experience should deploy AI and base search results on past behavior and personal preferences of shoppers. Many of the conversations we had with startup founders and innovation experts highlighted the importance of this technology in enabling deeper communication and relationship building between travelers and travel companies.

NLP (Natural Language Processing)

The ability for computer systems and platforms to understand natural human language and to then use that information to drive decision making and recommendations is rapidly changing the way that travelers shop for everything from airfare to in-country experiences. Natural language processing is the technology which allows a software program to understand what is being said by a human and then to translate that into insights and recommendations. At a high level, natural language processing, or NLP, is part of the artificial intelligence suite of tools. The pieces that make up NLP include speech recognition, natural language understanding, and natural language generation.

According to Booking.com CEO Gillian Tans speaking at Web Summit in November 2017, "Today, a lot of interfaces for booking require a lot of clicking and typing." She went on to say that natural language search and chatbots powered by AI would make those booking interfaces easier to use. The ability for NLP to make technology easier to interact with and more seamless for travelers to use is driving adoption of the technology across the board.



"Today, a lot of interfaces for booking require a lot of clicking and typing."

Gilian Tans CEO Booking

Augmented Reality and Virtual Reality

Augmented Reality (AR) and Virtual Reality (VR) are two technologies which have yet to fully come into their own in the travel sector, but there are indications that they represent a massive opportunity for the sector.

AR, an interactive experience whereby objects are augmented by virtual programs, shows definite potential for use in the travel and hospitality space.

One of the most popular examples of augmented reality to come out in the last few years has been Pokémon Go, which allowed users to chase and capture Pokémon in the real world while using their smartphones. Now, companies in the travel and hospitality sector are starting to look for ways to leverage the technology to enable travelers to get more out of their vacations or trips.

One company making waves in this space is LocusLabs which builds customized digital location experiences for making buildings and campuses more accessible and efficient. They worked with American Airlines at DFW (Dallas/Fort Worth) Airport to demonstrate why Augmented Reality could be a game changer for digital indoor wayfinding. Their app allows for AR functionality that superimposes data onto the screen of the smartphone to indicate nearby points of interest like shops and restaurants, as well as relevant directions, all while using the camera view within the smartphone.

VR, an interactive experience taking place within a virtual environment, already has several use cases within the travel space. In 2018 alone, SkyLights, a San Francisco based startup, brought Cinematic VR Entertainment to JAL (Japan Airlines), Emirates, Etihad, and Alaska Airlines. Another European startup Inflight VR just had their virtual reality headset deployed at the Star Alliance airport lounges in Paris and Rome.

Big Data Analytics

Big data analytics refers to anything that involves the aggregation of large amounts of information to help optimize certain business processes or procedures. Given the size of the travel and hospitality sector and the vast amount of data that is processed by travel companies, it is obvious that big data analytics will continue to grow in importance in the sector.

Airlines are some of the biggest aggregators of data in the sector, and because of this they have been looking closely at ways to better use and analyze the data they have at their disposal.

One of the companies that we invest in, FLYR, is looking to support the industry by leveraging big data and providing analytics to help airlines make better decisions around how to price their tickets and dynamic packaging and pricing that are not possible via traditional GDS tools.

Another one of the companies we've invested in, HYP3R, is leveraging massive amounts of data by geofencing the world's hotels and airports and then gathering information on individuals that visit those locations.

In each instance, these companies are working with large airlines and hotel chains to help them to leverage big data in different ways to provide better insights and analytics.



Predictive Analytics and Machine Learning

The power of technology to forecast everything from consumer demand for specific hotel rooms to potential travel delays at major airports is changing how businesses approach and measure demand in the travel sector. Computers are getting faster, cheaper, and better at predicting with relative certainty the likelihood that certain events will occur. Not only that, these systems can now more easily review and analyze massive amounts of data from the past to learn how to deal with certain issues in the future. Put together, predictive analytics and machine learning capabilities are changing how airlines and hotels do everything from schedule flights to price hotel rooms.

We have separated predictive analytics and machine learning from artificial intelligence because rather than being associated directly with interactions between a system and a consumer, they focus on the importance of prediction and continuous improvement.

Predictive analytics and machine learning tools are being used in the travel and hospitality space across a wide range of categories. For instance, another startup that we have invested in, Lumo, leverages big data to predict with a high level of accuracy when flights will be delayed. This benefits not only the traveler, but the airline itself. When Lumo predicts that a delay might occur, this information can easily be shared with the traveler but also with the airline. The traveler is kept up-to-date on possible issues, and the carrier is able to use this information to figure out how to avoid the delay or provide a solution to the traveler such as rebooking a flight.

Although predictive analytics and machine learning may sound similar to Artificial Intelligence, the reason that we flag these technologies separately is because they focus more on the usage of large amounts of data that is typically unseen by the traveler or unseen by a travel employee. Insights gathered through predictive analytics and machine learning often leverage big data and rely heavily on the unique algorithms developed to create recommendations based on this massive amount of information.

A deeper look into these amazing startups

As one might expect from one of the world's largest industries, there's no shortage of entrepreneurial talent tapping into these disruptive technologies. Approximately 2,000 active travel and hospitality tech startups have been founded since 2008. Let's take a look at some of them:

Lumo

Lumo is a travel technology startup based in Boston. The company is made up of a group of data geeks, PhDs, and aviation specialists who are passionate about solving one of the biggest challenges in travel today – flight delays and disruptions. It is estimated that flight delays cost the global economy more than \$60 billion annually in increased operating costs and lost productivity.

Leveraging technology developed under Small Business Innovation Research (SBIR) grants from NASA, Lumo helps everyone from individual travelers to large organizations predict flight delays hours, days and weeks ahead of time. By predicting these delays, Lumo makes it easier for people to deal with disruptions and the costs associated with those delays caused by inconvenience and missed flights. said Bala Chandran, CEO and co-founder of Lumo.

"For us the biggest feedback has been, 'I didn't know that this was possible but now that I know it's possible, I'm going to expect it every time I travel,'"

Bala Chandran CEO Lumo



Go Moment

Go Moment has become the world's largest artificial intelligence hotel concierge provider. Its platform, called Ivy, was launched out of necessity when founder Raj Singh saw inefficiencies in the way that guests were communicating with staff at his family's hotel portfolio. "One thing we've learned by serving tens of millions of guests is that they don't just want technology," said Singh.

Using his background with UX and technology design, Singh partnered with IBM Watson in 2013 and brought an AI-powered chatbot onto the market that has since taken care of tens of millions of guests in real time at hotels around the country. Using Ivy, Caesars Entertainment improved their customer experience scores by 15%, all through applying artificial intelligence-driven communications with its guests.

The company's results and market traction demonstrate how AI enabled technologies will drive higher engagement and consumer satisfaction. "Guests want a better experience. If technology is a tool that you can deploy to enable that better experience, that's great. Overly complicated services or offers that require you to download a mobile app to get some perk... guests just don't seem to care," said Singh. "For us, the biggest opportunity is to truly elevate customer service and guest experience."

HYP3R

HYP3R is a location-based marketing platform that helps businesses unlock geosocial data to acquire and engage high-value customers. The company holds multiple patents and uses geofencing technology and artificial intelligence to gather information on consumers locations to understand how best to target and deliver information to them when it is most relevant. "The travel industry has been disrupted over the last decade," said Carlos García, founder and CEO of HYP3R. "The macro problem is that even the largest players only know the customers who book directly with them. Today more than ever, building direct customer relationships is paramount."

Together with their partners, HYP3R is building a platform that helps companies engage with customers more effectively and be more efficient with their marketing. Since consumers post 10 times more on social media when they travel, the company integrates geosocial data in combination with predictive analytics to help drive engagement across hotel properties.

Marriott International, for example, uses HYP3R to sift through over 300,000 guests' social posts from its properties around the world, filtering results in ways that allow Marriott to directly with guests in personalized and meaningful ways.



"The travel industry has been disrupted over the decade."

Carlos García CEO HYP3R "The unknown guest is a multi-billion dollar problem in customer acquisition costs and marketing efficiency for the largest hospitality companies. We help the best marketers in the space acquire and engage high-value travelers in the context of location. This is why Fast Company named us one of the most innovative companies of 2018."

"Ultimately, our goal is to level the playing field in a disrupted landscape," said García. "There's a battle in the clouds over who owns the hospitality customer. But down on the ground, there are real people enjoying their travel experiences. The best marketers in hospitality use their locations to level the playing field with their disruptors and build a competitive advantage."

FLYR Labs

FLYR Labs is a travel technology company that is attempting to fix revenue management in the airline industry through AI and machine learning. With the power of machine learning, FLYR pulls together data from various sources to gain insights and help drive revenue for airlines in ways they have never been able to do before.

Their core solution, FusionRM, can programmatically extract and forecast user demand information well beyond what is currently available to revenue analysts. Not only can the system be used as an early warning to swiftly identify demand anomalies globally as they occur, FusionRM can also provide forecasts on future trends on a real-time basis.

One of the trends that has propelled the success of the company has been the ever-decreasing cost of manipulating data, collecting it, storing it, and developing standardized access to it. By leveraging advances in machine learning and lowering costs, the company has managed to carve out a niche in the sector to allow for everyone from airlines to metasearch sites (including TripAdvisor) to lock in travel fares and optimize pricing to drive revenue.

At Plug and Play We're Disrupting Travel. And This is How We're Doing It

Big corporations in the travel and hospitality space have long been thought of as lagging behind in technology adoption and openness to change. But those once slow to react are now developing corporate venture capital arms and innovation groups to leverage technological advancements at lightning speed.

Plug and Play's Travel and Hospitality practice bridges the gap between leading corporations and promising startups by providing the following services:



Accelerator Programs

Two 90-day accelerator programs designed and managed by 25+ travel corporations including but not limited to Accor, Jetblue Technology Ventures, AirAsia, Swissport, Carlson Wagonlit Travel, Manchester Airport Group, TUI Group, Ctrip, Trivago, Star Alliance, etc.

Plug and Play sources ~500 stage-agnostic startups every six months based on the collective interests of corporate partners. The list is narrowed to a top 100 list by conducting due diligence on the underlying technology of the startup, the team, funding and the competitive landscape.

Ultimately the corporate partners select ~20 of the startups to go through a 90-day accelerator program during which the corporate partners look into pilot, proof of concept, licensing, investing or acquisition opportunities.

This interaction between the corporate partners and startups helps Plug and Play ventures identify investment opportunities across the most promising startups.

Deal Flow Sessions

Plug and Play provides up to 6 private deal flow sessions for its corporate partners per year. Whereas the accelerator programs bring high-level innovations that can positively impact the entire travel industry, the deal is focused on specific problem statement(s) dictated by a single corporation. During these sessions, corporate partners have the opportunity to get a bit more granular and focus more on IP-related innovation initiatives.

Round Tables

Plug and Play hosts quarterly industry best practice round tables for its corporate partners.

During these sessions, success and failure innovation/digitalization stories are shared among corporate partners.

Some high-level topics include:



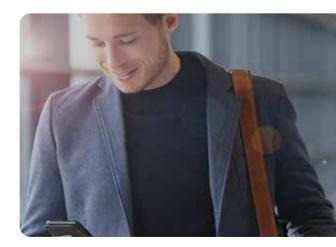
how to get various business units motivated to collaborate with startups alongside of regular daily operations



or what are the true metrics of success for a corporate innovation program, since most programs are viewed as a cost center rather than revenue generating initiatives.







Carlson Wagonlit Travel (CWT) is a multi-billion-dollar company that manages business travel, meetings and events for companies, governments and non-governmental organizations. The company has over 18,000 employees and is headquartered in Minneapolis, MN.

Business travel, while not as large a segment of the travel industry as tourism, represents a strong and growing sub-sector of the market. To maintain market share and drive growth in the business travel sector, CWT is continuously looking to drive open innovation throughout the organization.

"I think that one of the major trends is the growing use of technology like AI and machine learning to facilitate more personalized customer interactions," said Brandon Balcom, Sr Director of Open Innovation at CWT. "I'm not sure anyone has really cracked the code on it. There are use cases here and there and pockets of success, but it hasn't really taken off.

"I think that one of the major trends is the growing use of technology like AI and machine learning to facilitate more personalized customer interactions."

Brandon Balcom Sr Director of Open Innovation at CWT



Investing in cost savings strategies for clients is also of key importance to CWT, especially as their clients are businesses which are trying to save money across a large company. Often, these opportunities for cost-cutting come in the form of niche solutions which solve specific problems.

Through their partnership with Plug and Play, they developed a relationship with FLYR Labs. Through this collaboration, CWT has been testing how best to predict airline pricing to save clients money. For example, by delaying ticketing until it's the best time to buy, they can provide substantial cost savings to clients. Even if a price is quoted as something on day one, they might wait 10 hours if they can predict that it's going to go lower.

By taking advantage of all of these little opportunities without the heavy lifting that goes along with voiding a ticket and processing an exchange, CWT can drive cost savings for clients and ultimately deliver greater value. "Our opportunity for growth is to play a role outside of just air, car and hotel, and we're starting to do that today with the way we're providing new analytics to customers who are taking in expense and credit card data fees," said Balcom.

"We're taking that and stitching it all together, which is quite complex, to figure out how a certain meal correlates to this trip. So we help clients sift through all of that information, to understand what might be going out of a channel, or what might be a new category of expense that you're not managing."

jetBlue[.] technology ventures.



JetBlue is the sixth largest airline in the US. The low-cost airline has a fleet of over 250 aircraft and over 20,000 employees. Given its position and branding in the market, they are perfectly situated to drive the large-scale change that is currently unfolding in the global travel and hospitality sector.

To support its strategic vision and prepare for the future of travel, JetBlue launched JetBlue Technology Ventures (JTV) in 2015 in Silicon Valley. JTV is the venture capital subsidiary of JetBlue Airways, and has the mission to incubate, invest in and partner with early-stage startups launching businesses at the intersection between technology and travel.

"Al and machine learning have the potential to transform entire business models. The technologies can help operations run more efficiently and allow for more personalized bookings and transactions," said Bonny Simi, President of JTV. "But the necessary data needs to move from legacy hosted systems into the cloud, so we're seeing many different airlines and hotel groups move to these types of cloud-based systems and data lakes."

One of the startups that JTV has invested in and currently works with is the omnichannel communication platform Gladly. The platform gathers all travel information about an individual no matter if it comes from (email, text, etc.). This allows the agent serving a customer to know exactly what the customer is calling about, whether it's because they've had a flight cancellation or an email or a text they've received.

"At JetBlue Technology Ventures, we believe the travel industry is heading towards greater levels of personalization," said Simi. "Because of this, we're very focused on AI and machine learning elements that, once the data is unlocked, will allow us to utilize that data to provide new customized offerings."

One of the big pain points that travelers experience in air travel currently is the lack of a seamless way to manage customer complaints and issues through multiple channels as they arise. As part of their strategy to develop more customer-centric solutions for travelers, JTV is constantly on the lookout for businesses that will allow them to create better experiences for passengers at all stages of the journey. "Gladly makes you a person rather than a number, so it's really exciting," said Bonny Simi, President of JTV. "We started with a proof of concept and we did an investment and now we're doing a full-scale implementation with them."

"Al and machine learning have the potential to transform entire business models. The technologies can help operations run more efficiently and allow for more personalized bookings and transactions,"

Bonny Simi President of JetBlue Technology Ventures

Traveling the Road to Disruptive Growth

According to Amir Amidi, Founder of the Travel and Hospitality Center of Innovation at Plug and Play, the industry has seen disruption by players seeking to increase revenue, lower costs and increase loyalty throughout the traveler's journey.

"The big opportunity is how, through the entire travel journey, corporates and startups work together to develop a personalized experience." Amidi also says that "the future of travel involves seamless traveler experiences enabled by various legacy and new technology platforms. I believe the most cost and capital efficient path to true innovation is strategic collaboration between the leading travel industry suppliers/service providers and startups that are solving real-world problems.

Within the context of travel and hospitality, opportunities for innovation and investment are vast. The greatest growth and competitive advantage – for startups and corporate innovators alike – will come from a focus on:



Increasing revenue through technology: OTAs, hotels, and airlines see opportunities to increase revenues by automating and optimizing pricing and ticketing systems, and by upselling ancillary products and services. These efforts will be supported by predictive analytics and Artificial Intelligence. Reducing the cost of delivery to customers: When the cost of products and services goes down, businesses are better able to serve their customers while maintaining profitability. A major opportunity for travel and hospitality companies in the coming months will be to improve customer satisfaction through the use of Artif cial Intelligence, while cutting down on customer service wait times, and generally streamlining processes.

Developing a deeper sense of loyalty and stickiness: Loyalty programs have always been a big part of the travel and hospitality sector, but there is a growing opportunity for disruption in loyalty, as hotels and airlines look to leverage technology to snatch customers away from the big OTAs.

Producing operational efficiencies for companies: Similar to reducing the costs of delivering products and services to customers, developing operational efficiencies within travel and hospitality companies can help drive profitability by improving the overall bottom line. Businesses that are looking for ways to drive cost savings by reducing delays and forecasting when issues may arise, will be well positioned to take advantage of this opportunity.

and c

Using technology to create a seamless customer experience: When all is said and done, creating a seamless traveler experience may be the biggest opportunity of all. Companies that look at how to leverage technology so that it can support the travel journey from initial search and pre-booking through the end of the trip, will be best positioned to create lasting differentiation.

Learn more about our Travel & Hospitallity program

www.plugandplaytechcenter.com/travel