

TOWN HALL

Volume I; September 2021

‘TRANSFORMED ANALYTICS FOR TRANSFORMING AVIATION’

- The merger of Data Science and
Air Cargo operations



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CENTRAL IDEA

Comprehending Data Science in the Air Cargo Sector

SPEAKER

Ms Ojasvi Goswami, Project Lead - Airline Revenue Management System

MODERATOR

Ms Sayanti Halder, Content Manager - Marketing & PR

The fifth session of Town Hall was yet another success with the experts in the house, sharing their ideas, experiences and insights on Data Analytics. As the central idea suggested, the agenda was to comprehend Data Science in the Air Cargo sector and the speaker, Ms Ojasvi Goswami, shared some insightful knowledge on how this specifically benefits the Revenue Management System arm of the operations. “Today, we shall explore beyond the basics of Data Science and its implementation in the Air Cargo industry,” prompted the moderator.

Further, to unravel the nuances of Data Science and how it is influencing the Air Cargo Industry, the moderator presented a quick background about the broad understanding of Data Science’s gradual admittance and incorporation in our daily lives. “With the ever-evolving demands and complications of the customers, the method of delivering solutions has also evolved. On the other hand, technology is drastically changing the way businesses connect with their customers, make business decisions, and build workflows. Also, security and reliability have always been at the forefront of priorities in any business including the aviation industry. No doubt, data is transforming the way airlines think and act with a major impact on how its Air Cargo arm functions,” the moderator explained.

Like a noted American scientist, Edwards Deming once said, “Without Data, you are just another person with an opinion!” And, no one aims to build a business on the foundation of mere opinions.



At the very beginning of the session, it was established that the Data Science of today is shaping the aviation business of tomorrow! Hence, the session peaked when the speaker for the session gave a more in-depth understanding of the subject.

Ojasvi Goswami said, “Data Science won’t provide us with the competitive advantage that it used to provide, a few years ago. Nowadays, we need Data Science to stay in the competition. This field is rapidly evolving, and everyone is trying to solve their business problems using this technology. It will be no more ‘Garbage In, Garbage Out’ rather it will be ‘Garbage In, Business Out’.”

DHL analyses 58 different parameters of internal data to create a machine learning model for air freight. Rather than subjective guesswork, this method allows freight forwarders to predict if the average daily transit time is expected to rise or fall, up to a week in advance. Furthermore, this solution can identify other factors, which can influence shipment delays like climate and operational variables. Such insights are incredibly valuable in a sector like air freight, where it accounts for only one per cent of global trade in terms of tonnage but 35 per cent in terms of value.

Data science is a rapidly growing function, but industry experts say it is still in its infancy. And this is when we hit the golden hammer of opportunity! The Air Cargo industry is now primarily relying on automating its management and operation. Data Analytics offer Air Cargo carriers the only chance to manage assets effectively and improve margins. The power of Big Data is allowing logistics companies to forecast highly accurate outlooks and optimise future performance better than ever before. The insights of Big Data, especially when generated by Artificial Intelligence (AI), can improve many facets of the supply chain like route optimisation and supply chain transparency.

Why? Because the sector is complex, dynamic and relies on many moving parts. The freight business creates vast volumes of data, with approximately 400 million class-8 shipments every year in the USA alone. Computers may track thousands of data bits for each shipment, including pickup and drop-off times, facility wait times, pricing, tender acceptance, fuel utilised, and GPS coordinates throughout the shipment.

There would be one billion permutations if you operate in a marketplace with just 1,000 shipments accessible daily and track combinations of three shipments at a time. The more data given to ML models, the more effective they become. Also, the positive outcomes of the above-mentioned benefits encompass lower operating costs, better customer service, market-leading competitiveness and increased profit margin and shareholder value.

We have implemented ML models or time series models in our nGen RMS but the real challenge was handling the Data, processing it and making it eligible for forecasting so that airline transaction details can make sense. In the entire process, manual analysis of more than 50 lakh rows for a better understanding of data was done. More than 3000 graphs were plotted and the patterns of every O&D were differentiated. In RMS, there is not only one model or equation, but there are more than 1000 models and five statistical techniques, utilised for forecasting the future demand. An approximate number of forecasting equations is not less than 5000. Optimisation is another vertical of Data Science and is widely used in the Aviation Industry. The ML models operate continually and can keep up with the speed of freight, ensuring that coverage and support are never compromised.

The productive results garnered from the polls concluded that the Data Analytics segment of our company is shaping up great and the majority of the total crowd thinks that things are only to get better from here. Additionally, when asked about the importance of the human-touch aspects whilst the industry is automating its operations, the highest votes went to 'still very important', which was later discussed in detail by Mr Jasraj Chug and the other experts of the department.

Based on the live polling, around 88% of the audience agreed to have more subject-centric Town Halls that are insightful and engaging at the same time. Followed by this, the last poll was to decide which subject to consider as the next Town Hall's topic from the multiple subjects available. 59% of the audience voted for 'The Future of Air Cargo: Top Emerging Trends Reshaping the Industry', making it the next session's topic.

UPDATES

By **Bhavana Khera**, Head - Marketing

On behalf of the Marketing Department, Bhavana Khera shared a few updates with the present audience and also introduced the announcement jingle of the upcoming podcast series. The audience showed their utmost liking towards it whilst the Town Hall experienced a tide of likes when the jingle was played. Thereafter, she informed the audience that the marketing team had recently organised the first mini-workshop, on LinkedIn profile advancement, with the Sales Department. The talking point of this was the power of LinkedIn and how to use it effectively.

“We urge each of you to start utilising the power of social media to the best of your professional use. We have been actively doing various activities on all social media platforms. We want each one of you to become our brand advocates and promote, share, like and comment on Cargoflash posts and pages,” she further added.

CLOSING REMARK

By **Jasraj Chug**, Co-Founder & Director

“Our people are putting consistent effort into making Cargo Flash a top brand and it only happens when one has a cohesive team who believes in the leadership and a similar vision to take the company forward. Our people are succeeding in making our company a global brand where customers can trust for its processes, stability and capability to be a forerunner in contributing to the digitisation of the Air Cargo world, hence making it smarter and seamless. I want to assure you that we are not just making great products, but we are also absorbing the greatest of talents. And with great talents, greater products are coming in the next 12 months.

I urge all to pass on the message to their subordinates to perceive Cargo Flash as a long-term outlook and build their career here. This organisation is going to convert into a very large company in no time, and those who are already a part of the company will become strong pillars behind the company’s growth and foundation.

Also, you may encourage your colleagues to attend future Town Halls. Considering that we all are currently in remote work mode, I will say that attending Town Hall is the best possible way to stay updated about the company and the teams’ movements, respectively. This virtual world is the present day, so utilise it well to learn, unlearn and open your minds.

