

The air cargo industry is an integral driver for the overall logistics landscape, fueled primarily by demands from freight forwarders and shippers. As part of a large ecosystem consisting of multiple stakeholders, including freight forwarders, airport handlers and transportation firms, the industry has been facing persisting challenges to gain complete supply chain visibility and further plan operations optimally.

These challenges are exponentially aggravated due to the rising customer preference for more transparency and visibility on freight movement. In response, air cargo players are deeply investing in digital and technology trends to circumvent these challenges for achieving operational and business excellence.

EMERGING DIGITAL TRENDS IN AIR CARGO INDUSTRY

Big Data driven air cargo supply chain forecasting:

Historically, the air cargo industry has had limited supply chain visibility and access to data due to its complex value chain involving multiple stakeholders – freight forwarders, ground handlers, airports, shippers, etc. Recently, several initiatives are launched to develop a centralized data source and cater to market and peer trends. 'IATA ONE' is one such initiative which lists the relevant operational information across all the stakeholders to enable real-time analytics on industry trends, driving synergistic alliances. The air cargo leader, Lufthansa Cargo has invested in 'Data Insight Lab' to develop Big Data solutions to identify new patterns in existing data, making forecasts, visualizing result and driving data-driven decisions.

Airfreight visibility and tracking for cargo customers:

As per the air cargo industry reports, freight forwarders and shippers desire a better control and visibility into airfreight handling and management. Consequently, there is increasing adoption of digital platforms, computer vision and analytics for airfreight visibility and tracking. These technologies can additionally unclog operational bottlenecks across space utilization and cargo handling.

Following the trend, Qatar Airways Cargo has collaborated with a digital platform providing easy access to pharmaceutical shippers and logistics providers to define and search for cargo capabilities. Another air cargo leading player, Emirates SkyCargo allows shipment tracking through AWB (Air Waybill number).



Automated operations for cargo handling:

The air cargo industry, much like the wider logistics industry, has retained several manual processes resulting in poor operational efficiency and inflated costs. Several peers and travel associations are actively automating operations to make them fast and seamless. Implementation of E-AWB (electronic Air Waybill) has removed the need for paper documentation and manual efforts in air cargo handling. Qatar Airways Cargo has invested in several digital initiatives to improve operations including shipment tracking through RPA and automatic quotations.

Airfreight pricing and route planning analytics:

The air cargo industry is highly volatile and is dependent on several extraneous factors like manufacturing hub shifts, e-commerce boom, fuel price variation and geo-political trends. These factors can cause high variations in prices and route profitability. To plug existing revenue leakage, air cargo players are leveraging air cargo volume and category data to bolster their top-line growth. Such data-driven insights will enable air cargo businesses to adapt and benefit from the changing industry trends.





With several digital trends emerging in the air cargo industry across Big Data, Analytics, Automation, IOT, cargo players must step up their technology investments. IGT can help in setting up the best-inclass air cargo innovation center as first step in this endeavor backed by deep technology and air cargo experience. Further, the "innovation center" will spearhead innovation across different technologies as

per the stated vision and mission statements of the businesses.

Identifying prominent digital use-cases & roadmap creation:

Based on decided strategic themes & KPIs, IGT can evaluate all potential digital use-cases leveraging proprietary prioritization framework based on estimated benefit & feasibility. Further, we can develop an actionable implementation roadmap basis prioritized use-cases & KPIs defined to measure the progress of implementation roadmap.

Building digital solutions and bolstering capabilities:

Once use-cases are prioritized and incorporated into an actionable roadmap, IGT can assess the existing digital capability gaps. Further, we can bolster business capabilities across different digital and technology areas augmented with our comprehensive suite of service offerings like data modernization, advanced analytics, big data, intelligent automation etc. that are backed by experts with deep travel experience and relevant skillsets. To ensure the desired outcomes, we have also partnered with several industry leaders in developing ready-to-deploy best-in-class air cargo solutions.

IGT's COMPREHENSIVE AIR CARGO USE-CASES

IGT has created a comprehensive suite of Automation & Analytics use-cases for air cargo leveraging strong air cargo domain expertise backed by deep technical acumen across entire Digital & Analytics stack.

Automation:

The air cargo industry has several manual processes which involve intensive human efforts and are error-prone. Automating the existing manual processes through a business logic leveraging RPA can drive efficiency in air cargo operations (inventory, tracking, warehousing etc.) and revenue and accounting workloads (bills, rates, invoices etc.). Here are our automation-focused air cargo use-cases:



Air cargo operations automation

- Shipment tracking
- Inventory management
- Warehouse operations system (WOS) reconciliation
- Regulated agent list reconciliation

Air cargo revenue & accounting automation

- AWB processing
- Load and rate look-up
- Terminal charges
- Invoicing and credit collection

Analytics:

Predicting the air cargo market trends using analytics across the demand, supply and freight category dimensions can improve supply chain visibility and planning. Analytics can also help pinpoint potential top-line and bottom-line improvements leveraging insights across different business verticals like operations, sales and revenue. Further, analyzing customer experience trends through NPS, CSAT and contract fulfilment KPIs can drive revenue growth for freight forwarders and shippers. Here are our analytics-focused air cargo use-cases:

Air cargo market forecast & analytics

- Air cargo demand current volume & growth forecast (shipper, freight forwarder, etc.)
- Air cargo supply current volume & growth forecast (peer air cargo providers, etc.)
- Air cargo tonnage geography-wise and growth forecast
- Air freight category forecast (perishable, airmail, dangerous, pharma good, etc.)
- Air cargo buyer forecast (e-commerce, pharma, etc.)

Air cargo revenue and sales analytics

- Air cargo origin and destination analytics
- Air cargo revenue leakage optimization
- Air freight category pricing analytics (perishable, airmail, dangerous goods, etc.)
- Air cargo booking optimization

Air cargo operations analytics

- Air cargo space management analytics
- Air cargo fleet capacity planning & utilization
- Air freight 360 (tracking & loading analytics)
- Air cargo fuel optimization
- Air freight cold chain tracking
- Air cargo SLA & AHT analytics
- Dangerous air freight tracking
- Air cargo flight turnover analytics
- Air cargo agent analytics
- Air cargo predictive maintenance analytics

Freight forwarder & air cargo handler analytics

- Freight forwarder contract fulfilment analytics
- Freight forwarder NPS & CSAT score
- Cargo handler optimization analytics

