

A hand in a suit sleeve points towards a world map. Overlaid on the map is a network of white lines connecting various points, with several white airplane icons positioned at key nodes. The entire background is a solid purple color with some subtle circular patterns.

DESIGNERS OF DIGITISING THE ANTIQUE

CARGOFLASH'S CONTRIBUTION TO THE GROWTH OF
DIGITAL AIR CARGO MANAGEMENT

INTRODUCTION

Along with the infamous pandemic, came a revolution in the Air Cargo domain in terms of its demand and significance. The year 2020 witnessed a change, bringing the whole world to a stand-still. However, this dire situation also showed the entire world how noteworthy Air Cargo is to the supply chain. For decades, Air Cargo has not grown as expected and continues to remain as a small slice of the entire aviation cluster. But with the immediate demand for vaccines, sanitation kits and Door-to-Door deliveries, Air Cargo flew a few notches higher.

The World Air Cargo forecast report from Boeing predicts that the volume of data will be approximately 4.2 per cent per year for the period 2015 to 2035

The present-day challenges of Air Cargo include outdated technology, poor data and limited information sharing, thus affecting the financial performance of the carriers, and unnecessary complexities with the supply chain that hikes the cost. This sector was always technologically challenged. However, with the recent shifts of trends and demands and a massive paradigm shift surrounding the necessity of Air Cargo, the industry has finally recognised the need of making it **SWIFT, SIMPLE & SEAMLESS**.

Developments like big data, analytics, cloud computing, and the Internet of Things (IoT) are altering how Air Cargo operates, presently. The industry is investing in modern technology and developing digital products and services to further open up opportunities for the Air Cargo industry to grow. Furthermore, the air freight segment has become highly competitive in recent years.

All surviving forwarders will be more digitized by 2025 than they are today, and by 2030 they will be very digitized.

- McKinsey & Company

REDEFINING AIR CARGO MANAGEMENT

As a strategic partner of The International Air Transport Association (IATA), Cargoflash Infotech has successfully carved out its niche within this highly competitive market of the Air Cargo domain within a short span. Established in 2009, Cargoflash Infotech has consistently demonstrated the need to digitalising and automating the long-standing legacy system of this sector's operations and management.

The harbinger of digital Air Cargo management, Cargoflash has aided several airlines in modernising the logistics operations and enhancing its efficiency thus, increasing deliveries and revenue, while avoiding duplication or financial leakage. The company has allowed freight forwarders to connect directly with the airlines through the state-of-the-art 24x7 self-help portal, which not only allows the forwarders to book their cargo but also view their contract rates, allotments, request spot/Adhoc rates apart from filing complaints/claims and even view their invoices and pay directly from the portal; thus, aiming to enhance their overall cargo business experience.

By incorporating future-ready technology, with the company's expertise in various logistical domains, Air Cargo management is gradually becoming a structured and seamless affair with Cargoflash's designed software solutions.

READ MORE to comprehend how Cargoflash Infotech is delivering seamless, real-time Air Cargo solutions <https://www.cargoflash.com/>

OUR TRUSTED CLIENTS



ADDING SPEED TO THE GROWTH: SUCCESS STORIES

Cargoflash developed its **nGen Door-to-Door (D2D) System** to further expand the expanse of E-Commerce handling and enable the airlines to operate as a virtual integrator and directly handle E-Commerce shipments.

- ♦ One of our customers recorded **variance growth of 1942 %** in terms of E-Commerce consignments handled in 42 months
- ♦ **Gradual shift from conventional B2B Door-to-Door business to E-Commerce** handling led to a major improvement in Yield per Kg for the customer
- ♦ The customer **started with the entire outsourced network** and converted the network to a self-run model for warehousing by mid-2018 and the “First Mile to Last Mile” activities by early 2019
- ♦ **COVID-19** has impacted the growth due to disruption of air services, however, **the healthy intra-city volumes have cushioned the impact.**
- ♦ The E-Commerce messaging platform is seamlessly interfaced with the E-Commerce Customer System as well as the nGen Virtual Integrator System for real-time data transfer.

READ MORE to know how **Lion Air** established a strong footing in its E-Commerce vertical with the help of Cargoflash <https://www.cargoflash.com/resources#casestudy>

Recently, Cargoflash Infotech has renewed its agreement with an existing client to continue providing next-generation **Cargo and Warehouse Management systems (nGen WMS)**. The agreement to sign the addendum for the extension of the contract further shows the confidence and accomplishment that the client has gathered from Cargoflash's support, in the due course of time.

READ MORE to understand how we benefitted Swissport to provide end-to-end benefits for its warehouse and slot management. <https://www.cargoflash.com/static/pdf/Swissport-Cargo-Flash-Infotech-Customer-Case-Studies.pdf>

TECHNOLOGY USED BY CARGOFLASH

APPLICATION DEVELOPMENT

Cargoflash boasts of advanced Application Development that includes programming, documentation, testing, and bug fixing to create and maintain applications and frameworks involved in the ecosystem of software development, resulting in software production.

- ♦ **Front End** - HTML5, Angular, jQuery, NodeJs, Bootstrap, KendoUI, TypeScript, ReactJS, XSLT/XSD
- ♦ **Services** - Micro Services, SOAP-based Web Services, Rest WCF Services, API
- ♦ **Microsoft** - .NET Framework, C#, ADO.Net, ASP.Net, MVC, ASP.Net Core, Entity Framework
- ♦ **EDI/ETL** - Python, Machine Learning, JavaScript, EDI
- ♦ **Databases** - MS SQL Server, Azure DB, MongoDB
- ♦ **Continuous Integration** - Jenkins, Docker, Kubernetes

Cargoflash is a Microsoft Gold-Certified Partner for Application Development and Cloud Platform. The company is delivering cutting-edge solutions, established on Microsoft Products, for over a decade and its strong partnership with Microsoft enables Cargoflash to implement solutions quickly, efficiently and profitably.

MOBILE DEVELOPMENT

Mobile applications have become omnipresent across a broad range of organisations, globally. We specialize in mobile development with experience in all the major operating systems (iOS and Android). We help to provide end-to-end strategy and services to address the challenges and opportunities of our clients' business shifting to mobile phones.

Our Contribution:

- ♦ Mobile application development
- ♦ HHT (Hand Held device)

Our Expertise:

- ♦ Android Platform
- ♦ iOS Platform

DEDICATED DEVELOPMENT ENVIRONMENT

Cargoflash has shaped a dedicated development environment, which is the provision of full-time, cost-effective development resources, specifically allocated for a client to partner on a long-term basis. The development team of Cargoflash is dedicated to such a model, exclusively assigned for distinct tasks or clients. The team perceives the requirements, business objectives, project expectations, and priorities of every client and communicate via chat, or emails, using the Microsoft Team meeting tool for tele- and video conferencing.

SOFTWARE QUALITY

Cargoflash is a CMMi Level 3 Company. Software Quality is a systematic process of checking whether a product or service is meeting the specified requirements. The objective is to prevent mistakes or defects in developed products and avoid problems when delivering solutions or services to clients. Cargoflash excels in a software quality system that increases its client's confidence and company's credibility, improve work processes and efficiency, thus enabling the company to compete more assertively in the market.

The company has a mature and robust defect management process, in which all faults are logged in a defect tracking tool for analysis. Cargoflash Infotech brags of a strong and skilful testing team that works in system testing and unit testing, and support the following tools:

Manual Testing

- Web – Cross Browser, Web Accessibility
- Cloud – Cross Browser
- Device – Android, IPad, HHT Device

Automation

- Selenium – Hybrid, Keyword Driven
- UFT – Keyword Driven
- Data-Driven

Performance Testing

- Web Application – JMeter
- API – JMeter

Database Testing

- MS-SQL, Azure Database, MongoDB

Also, we use Microsoft -TFS / Azure Dev-OPS as defect tracking tools.

To keep abreast with the latest technology, Cargoflash is in the process of upgrading its framework for the system as well as the Mobile/ HHT application. This would ensure faster, efficient data management.

RECENT DEVELOPMENTS

- ♦ Implemented its (D2D) E-Commerce's **'First and Last Mile'** handling and tracking solution for its esteemed clients. The clients can now seamlessly integrate their Airline Cargo terminal operations with the 'First and Last Mile' warehousing E-Commerce platform
- ♦ Applied advanced **encrypted messaging technology** in its cloud-based software solutions, by partnering with EDIfly

The **single platform solutions** are allowing the aviation stakeholders to access real-time information, for Proactive Data Analysis, leading to a better cargo product definition.

Implemented its newest module of **Target Management System**, which manages for an airline its budgets and targets for head-office and stations and can be even tracked for each salesperson.

With the seamless and speedy solutions, we aim to draw more potential stakeholders and spearhead the idea of how technology can simplify the entire Air Cargo operation as we effectively digitalise its management, worldwide.

THE WAY FORWARD

- ♦ **AI Chatbot (nGen Vani)** - A multilingual Chatbot (Voice & Text-based) will enable the users to have human-like interaction with the system and get the desired information
- ♦ **3-D Warehouse Visualisation** – A tool to assist the warehouse supervisor to view the warehouse on a real-time basis and plan shipment storage/ retrieval based on the Loading Instruction Priority
- ♦ **Forklift Panel** - The Forklift Panel will be upgraded with GPS capability to give a real-time bird's eye view besides navigation inside the warehouse for the forklift operator
- ♦ **Loading Optimizer** - This tool will be created using Optimization Techniques to simulate the ULD Build-up based on the available resources – Cargo & ULDs
- ♦ **Kaizala Messaging Interface** – nGen is planned to get an interface with Microsoft's Kaizala for cost-effective transmission of notifications to the customers
- ♦ **Cargo Lens using AI/ML** – A shipment recognition technology designed to bring up a feasible set of relevant information related to cargo with no labels and markings and also, associate with the accurate Airway Bill (AWB)

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THANK YOU

www.cargoflash.com

For any questions, suggestions, comments or feedback,
feel free to write us at marketing@cargoflash.net

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creating value