

IATA
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Digitalization in Air Cargo: Navigating the Future

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Digitalization in Air Cargo

Cargo trends	Impact of digitalization
▪ E-Commerce Growth	▪ Digital tools streamline logistics for surging e-commerce demands
▪ Sustainability Focus	▪ Analytics and digital efficiencies drive sustainable air cargo practices
▪ Capacity Fluctuations	▪ Predictive tech stabilizes rates, enhances supply chain adaptability
▪ Technology Integration	▪ AI, IoT, cloud innovate for transparent, efficient logistics operations

E-Commerce Growth:

- Surge in e-commerce driving demand for faster and more reliable air cargo services.
- Digitalization key to managing complex logistics and distribution networks efficiently.

Impact of Digitalization:

- Streamlined operations through digital tools to meet the demands of a rapidly growing e-commerce sector.
- Adoption of digital platforms for real-time tracking and inventory management.

Sustainability Focus:

- Digital efficiencies enabling better fuel management and route optimization.
- Use of analytics to support sustainable practices and reduce environmental impact.

Capacity Fluctuations:

- Predictive technology for better capacity planning and rate stabilization.
- Enhanced supply chain adaptability through digital solutions that respond to dynamic market conditions.

Technology Integration:

- Implementation of AI, IoT, and blockchain for improved operational transparency.
- Innovations in digitalization leading to more efficient, secure, and transparent logistics operations.

Data in air cargo: many stakeholders

- 1. Shipment Information:** Details about cargo type, weight, volume, and quantity.
- 2. Booking Details:** Cargo booking references and flight information.
- 3. Cargo Handling Details:** Information on cargo arrival, storage, and handling at airports.
- 4. Customs Data:** Documents and information for customs clearance.
- 5. Condition Monitoring:** Data on environmental conditions for sensitive shipments.



Data in air cargo: many functions

6. Track and Trace: Real-time location and status of shipments.

7. Dangerous Goods Info: Safety details and documentation for hazardous materials.

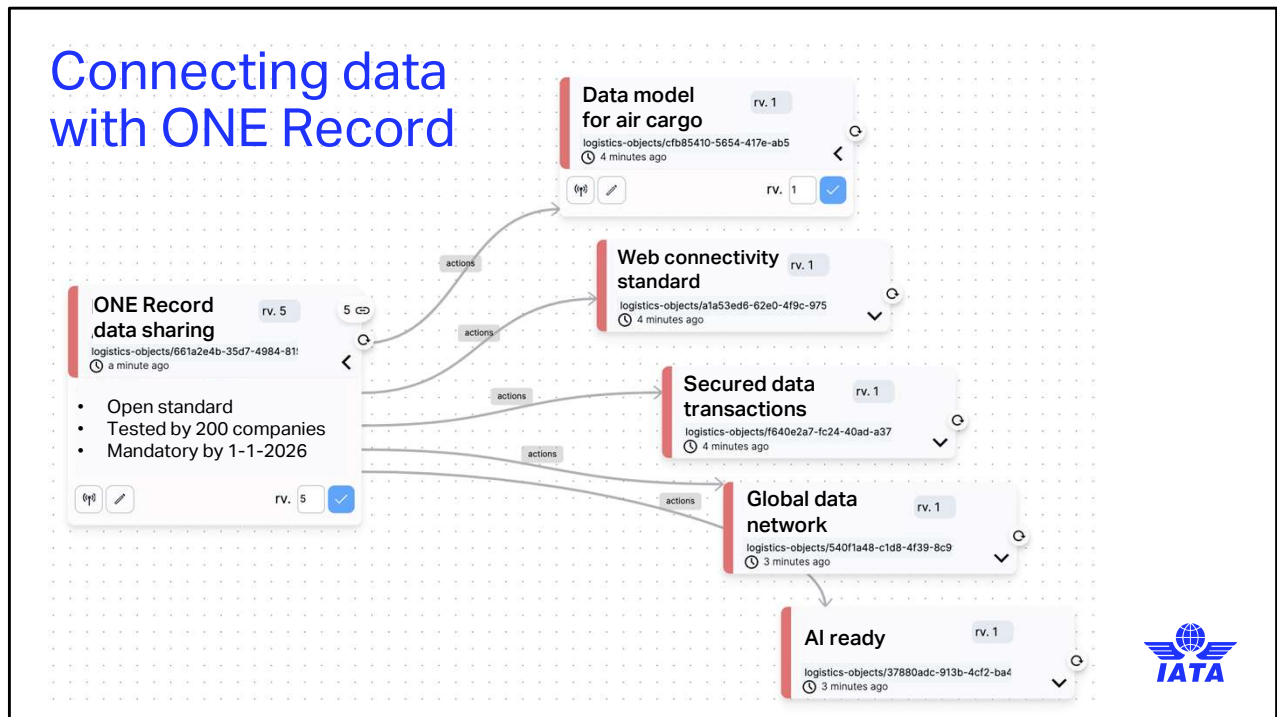
8. Transportation Plans: Itineraries and routes for cargo transit.

9. Financial Information: Billing, invoicing, and payment details.

10. Insurance Details: Cargo insurance coverage and policy information.



Connecting data with ONE Record



ONE Record Data Sharing:

- Introduces a new standard for data sharing across the air cargo industry.
- It has been tested and validated by over 200 companies for reliability and efficiency.
- Adoption of this standard was mandated for industry compliance by January 1, 2016.

Data Model for Air Cargo:

- Provides a unified and streamlined approach to structuring air cargo data.
- Facilitates consistency in how air cargo information is recorded and exchanged.

Web Connectivity Standard:

- Establishes guidelines for connecting different systems across the web to enable seamless data exchange.
- Ensures compatibility and interoperability among various digital platforms in air cargo.

Secured Data Transactions:

- Ensures data integrity and security across digital transactions.
- Utilizes advanced encryption and security protocols to protect sensitive information.

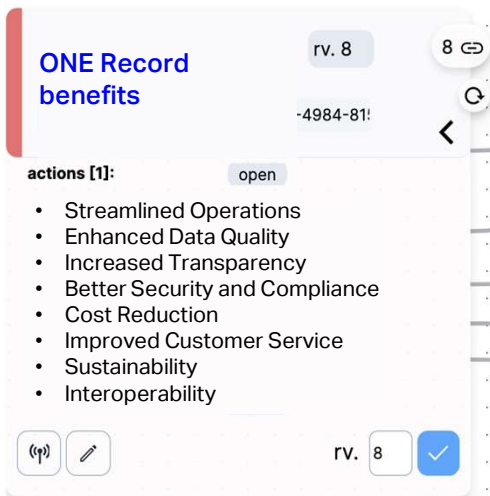
Global Data Network:

- Aims to create a worldwide network for sharing air cargo data.
- Enhances global collaboration and accessibility of data.

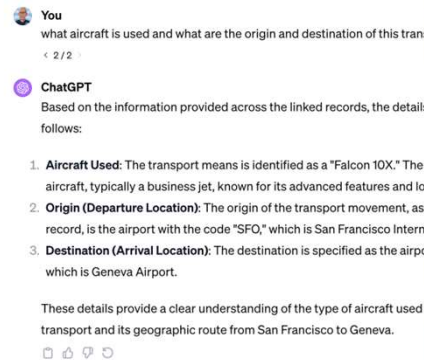
AI Ready:

- Prepares the air cargo industry for the integration of artificial intelligence technologies.
- Lays the foundation for future innovations and advanced analytics in logistics.

ONE Record impact



Direct AI interaction



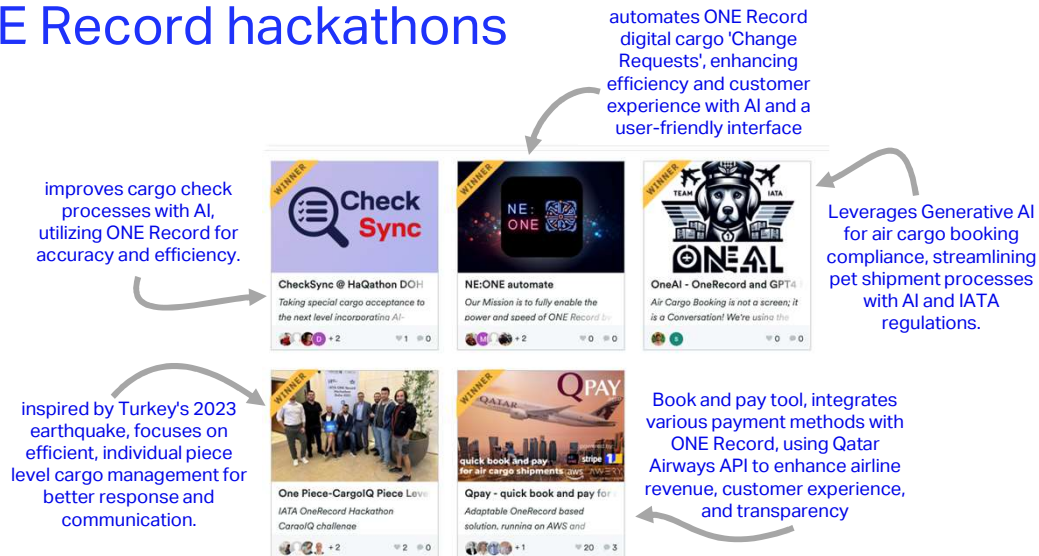
ONE Record Benefits:

- Streamlined Operations: Simplifying processes for efficiency.
- Enhanced Data Quality: Ensuring accuracy and reliability of data.
- Increased Transparency: Providing clear visibility into operations.
- Better Security and Compliance: Strengthening protection and adherence to regulations.
- Cost Reduction: Decreasing expenses through improved operations.
- Improved Customer Service: Delivering superior service experiences.
- Sustainability: Fostering environmentally responsible practices.
- Interoperability: Enabling systems and organizations to work together seamlessly.

Example of direct AI interaction:

- The AI's response serves as a practical example of how ONE Record can impact day-to-day operations by providing specific and immediate information upon request.
- This implies an efficient use of technology to enhance operational awareness and decision-making in real-time transport scenarios.

ONE Record hackathons



8th Hackathon in Doha, November 2023

ONE Record Hackathons Overview:

- Hackathons focused on utilizing ONE Record for various innovative applications in cargo management and processing.

CheckSync:

- A winning solution from a hackathon that improves cargo check processes with AI, leveraging ONE Record to increase accuracy and efficiency.

NE:ONE automate:

- Automates ONE Record digital cargo 'Change Requests', aiming to enhance efficiency and customer experience with AI and a user-friendly interface.

OneAI:

- Leverages Generative AI for air cargo booking compliance, streamlining pet shipment processes in accordance with AI and IATA regulations.

One Piece-CargoIQ:

- Inspired by Turkey's 2023 earthquake, this solution focuses on efficient, individual piece-level cargo management for better response and communication.

Qpay:

- A book and pay tool that integrates various payment methods with ONE Record, using Qatar Airways API to boost airline revenue, customer experience, and transparency.

Each point represents a project that has won a hackathon challenge, demonstrating the wide