Digitalization in Air Cargo: Navigating the Future

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#IATAGMD
## Digitalization in Air Cargo

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### 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.
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, 2026.

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 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 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