ubloquity®

Harnessing blockchain to navigate supply constraints in the global aviation industry

introduction

In the face of significant supply constraints impacting the global aviation industry, there's a compelling need for innovative solutions to address the complex challenges airlines face today.

A recent analysis by ING in their Global Aviation Outlook report highlights how **supply chain disruptions**, exacerbated by geopolitical tensions and pandemic-related impacts, **continue to cloud the skies for airlines worldwide**. As the CEO of ubloquity, I believe that blockchain technology offers a transformative approach to these persistent issues, enhancing transparency, efficiency, and trust across the aviation supply chain.

Kieran Kelly
CEO, ubloquity

Understanding the challenges

The aviation industry is currently navigating through turbulent times with airlines struggling to expand their fleets amid extended lead times for new aircraft and maintenance delays due to parts shortages.

This situation is further complicated by the pressing need to transition towards more sustainable operations, aligning with stricter environmental regulations and changing consumer expectations.

By the numbers

how supply chain issues are impacting the aviation outlook in 2024

Older aircraft fleets are using

10%–25%

more fuel than newer models undelivered due to supply chain delays
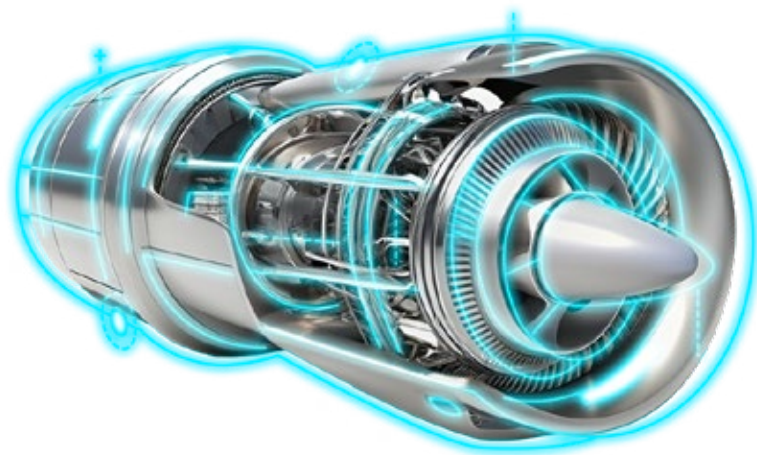
1.5%

of global fleet grounded

Source: ING'S Global Aviation Outlook 2024

More than

14K

commercial airplanes in production backlogs

Demand for older aircraft has increased lease rates almost

20%

The blockchain solution: transparency and efficiency

At ubloquity, our blockchain platform is designed to create a more resilient and transparent supply chain for the aviation industry. Here's how we can help:

1. **Enhanced transparency:**

   Our blockchain solution provides a single source of truth for all transactions and interactions across the supply chain.

   This transparency is crucial for airlines as it enables real-time tracking of parts and components, ensuring that all stakeholders have access to the same information, reducing disputes and increasing trust.

2. **Streamlined operations:**

   Blockchain can significantly reduce the complexities involved in procurement and maintenance scheduling.

   By automating these processes through smart contracts, airlines can ensure that parts and services are procured promptly, thus minimising downtime and improving fleet readiness

3. **Improved compliance and reporting:**

   With stricter environmental regulations coming into play, our blockchain platform can help airlines effortlessly track and verify their compliance.

   The immutable nature of blockchain makes it an ideal tool for maintaining auditable records of an aircraft's lifecycle, from fuel use to maintenance, ensuring adherence to sustainability standards.

4. **Decentralised data management:**

   The decentralised aspect of blockchain allows for a more robust and secure data management system. This is particularly important in an era where cyber threats are becoming more prevalent.

   Airlines can benefit from enhanced security measures inherent in blockchain technology, protecting sensitive data from unauthorised access and cyber-attacks.

conclusion

Future-proofing the aviation industry

As airlines continue to seek solutions that can address both current and future challenges, blockchain stands out as a technology that not only meets these needs but also drives innovation. By adopting blockchain, airlines can look forward to reduced inefficiencies, enhanced operational readiness, and a stronger commitment to environmental stewardship.

At ubloquity, we are dedicated to pioneering blockchain solutions that empower the aviation industry to overcome its biggest hurdles. Our approach is not just about integrating new technology—it's about setting a new standard for how the global aviation sector operates in an increasingly digital world.

As we move forward, industry leaders must embrace these technological advancements. I invite my peers in the aviation industry to explore how ubloquity's blockchain solutions can be part of your strategy to navigate through these challenging times and emerge stronger on the other side.

*Blockchain is more than a technology —
it's the future of the aviation supply chain*

about ubloquity

ubloquity leverages cutting-edge blockchain and AI technology to provide secure, transparent, and efficient digital asset identification, authentication, and traceability solutions across global supply chains, including freight, pharma, aerospace, and defence.

By enabling real-time visibility and compliance through a decentralised platform, ubloquity empowers businesses to enhance security, streamline operations, and build trust with their customers. Trusted by industry leaders, ubloquity's innovative solutions ensure the seamless and frictionless movement of goods while maintaining the highest standards of product integrity and customer satisfaction.