

Charting the Skyways: A Vision for Air Cargo Industry

Dr. Pushendra Pratap Singh, Country Head, Asia Shipping, discusses the impact of e-commerce on air cargo, collaboration within the industry, the role of AI and machine learning, challenges in implementing autonomous cargo drones, government initiatives, and key trends in the air cargo industry for the next decade.

E-commerce's impact on air cargo is undeniable. Industry leaders must adapt to online retailers' needs for swift logistics, with same-day domestic and 72-hour international delivery demands. E-commerce now comprises up to 25 percent of air cargo, requiring speed, transparency, reliability, and consistency for competitiveness.

Collaboration

Dr. Singh highlights that industry leaders can improve efficiency by engaging third parties and employing advanced technology like integrated software, automation, and robotics. The collaborative network involving airlines, airports, and logistics companies nurtures efficiency, enabling global shipping for e-commerce while capitalising on economies of scale. The integration of these stakeholders enhances operational excellence, paving the way for a more streamlined air cargo network.

Transformation

He recognises the significant influence of artificial intelligence and machine learning on the operations of the air cargo industry. These technologies offer unparalleled value by reducing costs, minimising operational errors, mitigating risks, and enhancing supply chain forecasting. They also improve customer service with error-free, real-time tracking and quicker deliveries. Recent studies indicate cost reductions and revenue increases due to the introduc-



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tion of artificial intelligence in the supply chain.

Drone Future

Dr. Singh underscores the inescapable nature of change within the air cargo sector. Innovations and mobile applications are fueling the expansion of autonomous cargo drones and urban air mobility. Notable challenges involve safeguarding cargo, tackling planning and execution hurdles, and managing complexities in airspace adjustments associated with route changes. Additionally, the industry needs to take into account community approval, as concerns from society have surfaced regarding

the realisation of these groundbreaking technologies.

Government Support

He also commends the Indian government's robust initiatives to bolster the air cargo sector. These efforts include technological enhancements for paperless cargo processes and significant infrastructure development. The surge in air cargo demand, driven by burgeoning e-commerce and parcel services, has prompted the government to set ambitious targets, aiming for 10 million metric tons by 2030. Investments in physical infrastructure, including dedicated freight corridors, cold storage facilities, and strategically located warehouses, are facilitating the seamless movement of goods by rail, road, and air.

Future Trends

Dr. Singh anticipates that the air cargo industry's growth will hinge on faster and smoother deliveries, driven by an increasing demand for high-value, time-sensitive shipments. With a projected 5 percent growth between 2023 and 2032, the industry is expected to invest in improved airport and cargo infrastructure, including world-class amenities, expanded runways, technological enhancements, and error-proof software systems. These innovations will shape the industry's landscape in the coming 5–10 years, meeting the expectations of a dynamic and demanding customer base. ●