Cargo drones to transform the transport and logistics sector

The emergence of cargo drones is set to drastically improve the logistics and transportation sector. While there may be concerns that its effect could be adverse, experts remain optimistic as start-up disruptions, major technological advancements and figures suggest a positive state-of-affairs.

According to The Insight Partners, the global drone logistics and transportation market generated over \$24 million in revenue in 2018, with growth estimated to reach \$1.6 billion by 2027.

Various start-ups like Natilus, Volans-i, Matternet and Zipline believe the solution lies in autonomous flying drones that can carry goods and heavy cargo, and are able to fly long distances to deliver products, supplies and medical samples.

Stephen Morris, Acting Director General of FIATA (the International Federation of Freight Forwarders' Association) sees cargo drones as the necessary tool that will transform the global air freight industry, especially on the African continent where many remain cut off from modern infrastructure.

"Drone deliveries occur in a fraction of the time that more traditional modes are able to. As demand for delivery continues to increase due to the rise of e-commerce, it cannot be denied that drones will play a major role in many sectors in the future."

Co-Founder and CEO of DRONAMICS Global Ltd and speaker at the upcoming FIATA World Congress, Svilen Rangelov, believes drones will contribute to transportation in the same way that the internet contributed to communication and payment.

"Heavy-lifting cargo drones will be able to mitigate a number of challenges within the logistics industry."

Rangelov explains that everyone who lives in a big city can have their needs met within the same day.

"But, for the billions that live outside of the main centres of commerce, life can move a lot slower and it can be more costly. Cargo drones, if done right, can change this, and bring all the efficiencies of a big city to even the smallest and most remote community, unlocking tremendous economic opportunity."

Realistically speaking, cargo drone operations are bound to come with many pros and cons but Rangelov is confident that smart design can minimize the latter. "A common complaint for multi-rotor or VTOL drones is the noise, which can be eliminated by a fixed-wing design instead and by landing on dedicated drone ports, rather than in people's backyards."

He believes that the rise of cargo drones will also be beneficial to transportation systems.

"Numerous studies show that improved connectivity has a strong multiplier effect and quickly and positively affects quality of life and economic development."

Rangelov envisions a future that is more decentralised, instead of aggregated in hubs. He adds that with shortened delivery timelines and demands for fast service on the rise, it makes no sense for cargo to go extra miles transiting through hubs, but rather to be sent to the destination directly from the origin.

Morris encourages traditional operators to embrace the new dawn that drones has ushered in.

"Decentralised last-mile delivery services are a growing industry that will interface with central logistics platforms and can be expected to do so even more as they become autonomous. In time, this will allow for autonomous, platform-enabled solutions for last-mile delivery."

Svilen Rangelov will be speaking at the annual <u>FIATA World Congress</u> to be held at the Cape Town International Convention Centre from 1-5 October 2019.

The event is organised in conjunction with The South African Association of Freight Forwarders (SAAFF) and will serve as an international platform for industry leaders to discuss sustainable solutions within the freight forwarding and transport sector in Africa./