

Delivery Improvement via Drones in AMAZON

Background:

Technology always helped in making our lives easier and to make the simple and fastest approach for each task in the world. Over the past centuries, people have switched to eCommerce that will be expected to become a global trend. Big companies like Amazon are always looking to bring more and more technology to provide faster, reliable, and more quality service to their customers.

Amazon was the first company to provide 2 days delivery service, and they always did reengineering their delivery process to make it more faster and reliable for their customers. Later, they started to provide a 1-day delivery service which was quite impressive.

Problem:

But, due to the pandemic, eCommerce traditional delivery services needs to be more effective to find a solution for social distancing, client satisfaction, and to improve the quality and time of delivery for customers. And that's why 1-day delivery service was not quite helpful during the pandemic. That's why they brought drones delivery that is more advance, time, and cost-consuming for the customers.

Solution:

Customers have an option to select this delivery option and the drone will deliver the product in 30 mins. There are many constraints that they work on to maintain the quality and safety of the customers. The drone is a hybrid design that can do vertical takeoff and landings like a helicopter.

There are a few constraints that they resolved by providing drone delivery

- Save labor and material costs for delivery
- Time-consuming from 24 hours to 30 mins

- Drones with AI and machine learning can detect wires, clotheslines or any moving objects to be avoided for safety purposes
- Advanced algorithm to detect small area free of people and animals to be landed safely
- No physical interaction, maintaining social distance to stay safe and healthy