**DRONE X DELIVERY (DRONELIVERY)**
New Delivery Era

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**Motivation**

- **COVID-19 Pandemic**
  - Decreasing Chance of Eating Out
- "Work From Home" Culture
  - Increasing Chance of WFH
- **High Demand In Delivery Service**
  - Increasing Food Delivery Order
  - Increasing Online Shopping
- **VR & Metaverse Networking**
  - Immersive Social Networking At Home
  - Online Community

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**Impact to society**

- **Reducing Carbon Emission**
  - Using Drones Instead of Trucks
- **Increasing Market Revenue**
  - Faster Delivery Time
  - Increasing Online Purchasing
- **Better Quality of Life**
  - More Convenient to Get Delivery
  - Instant Order, Fast Delivery, Immediate Use

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**Planning**

- **Worldwide Operation**
  Japan -> Taiwan -> EU -> US -> HK
  Based on:
  - Population Density
  - Building Height
  - Delivery Culture
  - Travelling Distance

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**Technology**

- GPS Autopilot
- LiDAR Camera
- Direct Georeferencing
- Machine-To-Machine Communication
- Cloud Database
DRONE X DELIVERY
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How does It Work?

Constraints and Solutions

- **Low Battery Life** (Only 30 minutes flight time)
  Sol: Battery with a larger capacity
  Setting more charging regions around the city.
- **Small bearing capacity** (Less than 5 pounds)
  Sol: Powerful turbo-generator
- **Difficult in detecting specified location and floor**
  Sol: IoT technology e.g. GPS autopilot & machine learning
  Machine-to-machine communication using big data from Cloud.
- **Privacy in drone travelling**
  Sol: Installing LiDAR camera instead of live camera
  Detect surrounding georeferencing image.

Implementation

**Brief Step**

1. Order Online -> Transmit data to cloud -> Analyze data -> Send drone
2. Drone autopilot -> Using LiDAR camera to georeferencing
3. Find exact location -> Verify location -> Place order
4. Unpack order -> Drone back to the nearest station

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