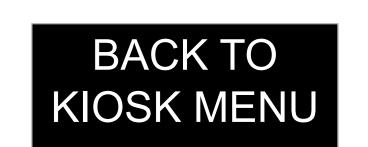


Student: Blane Butcher, SCM 2019 Student: Kok Weng Lim, SCM 2019

Advisor: Dr. Justin Boutilier Sponsor: Iron Mountain

Drone Delivery: Deal or No Deal





Motivation / Background

- Shortage of truck drivers is at historic levels.
- Huge potential in transportation cost savings by using drones for last mile deliveries.
- Research estimated that delivering a package by drone can reduce greenhouse gas emission by 54%.



Key Questions / Hypothesis

- Will drone delivery ever be feasible?
- When is the right time to invest in drone delivery?
- In what capacity can drone delivery replace traditional methods?

Relevant Literature

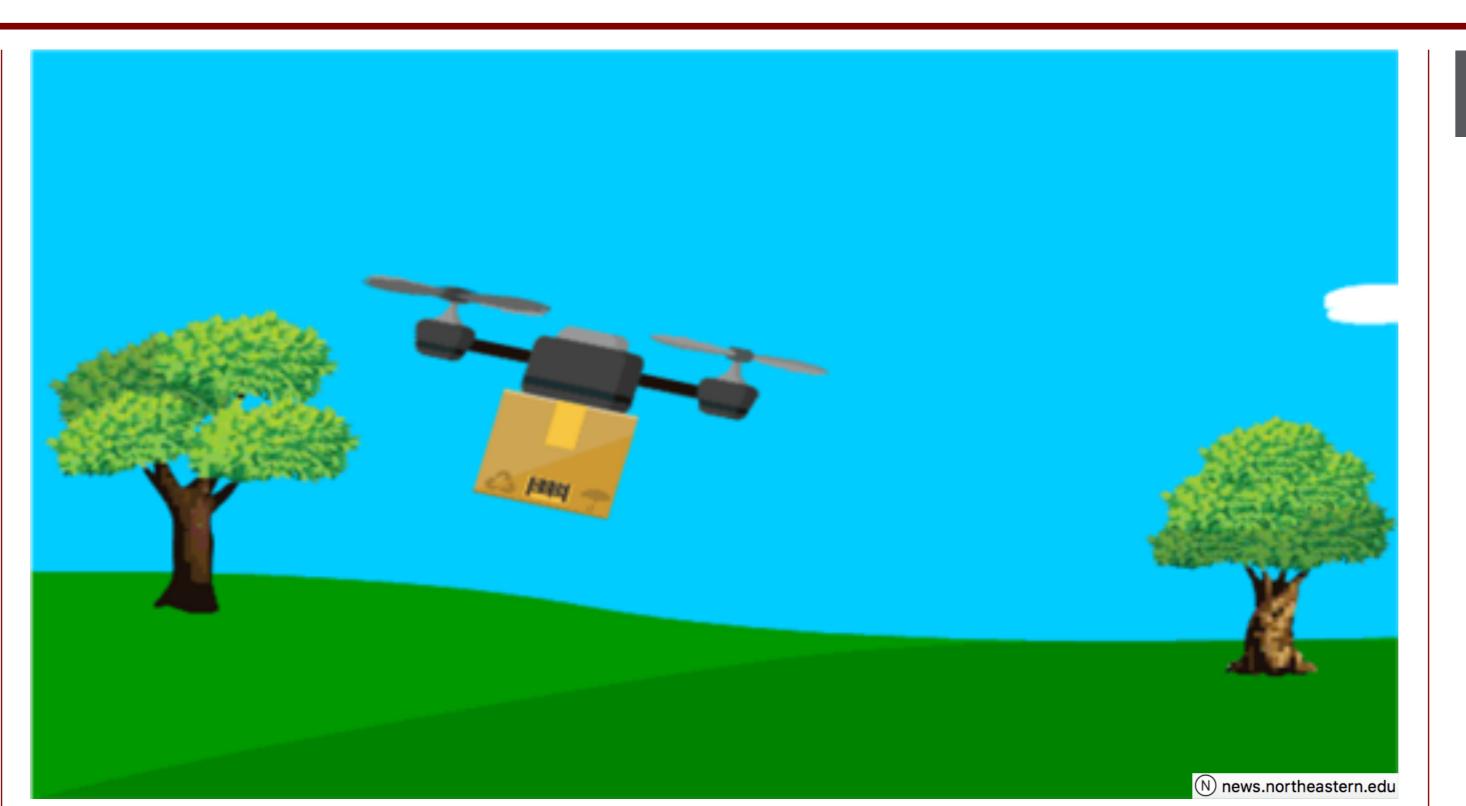












The Problem

To invest or not to invest?

- Regulations
- Infrastructure requirements
- Technological limitations



- Cost savings
- Commitment to sustainability
- Serve demand

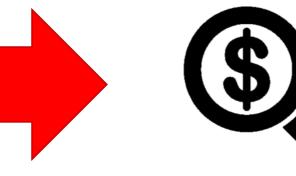
Financial Viability

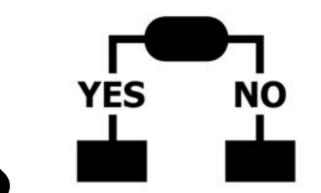
Methodology

Operational Feasibility



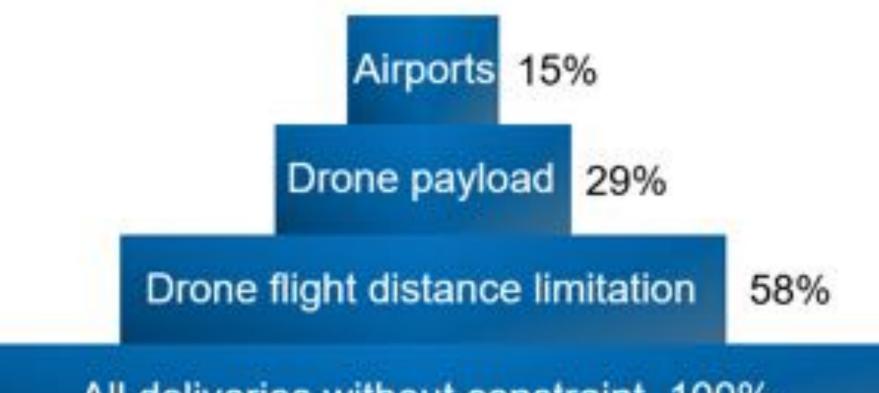






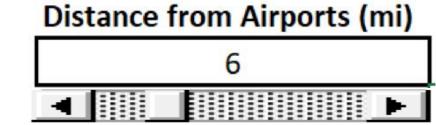
Initial Results

% of Orders Feasible for Drone Delivery based on Different Constraints



All deliveries without constraint, 100%





Expected Contribution

Our framework gives executives an adaptable tool to analyze the potential for drone implementation via the following perspectives:

- % of deliveries eligible for drone delivery
- Financial returns
- Benefits from implementing now or later
- Sustainable value created

Blane Butcher



Kok Weng Lim



