



## Team Alpha:

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# Outline

1. Problem
2. Verification
3. Solution: AirGo
4. Further development
5. Financial consideration
6. Conclusion

# Problem identification

*Underutilized customer's time lead to low shops exposure*



Too many queues

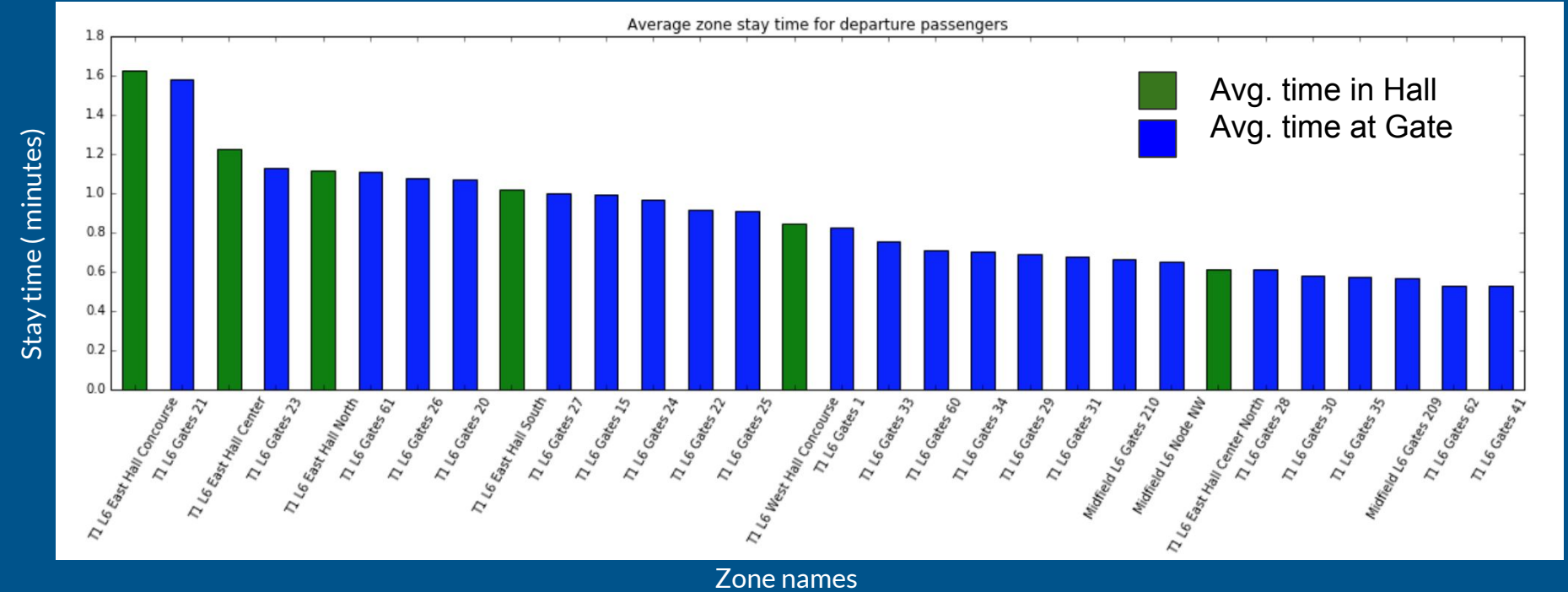


Long distance walk to the gate



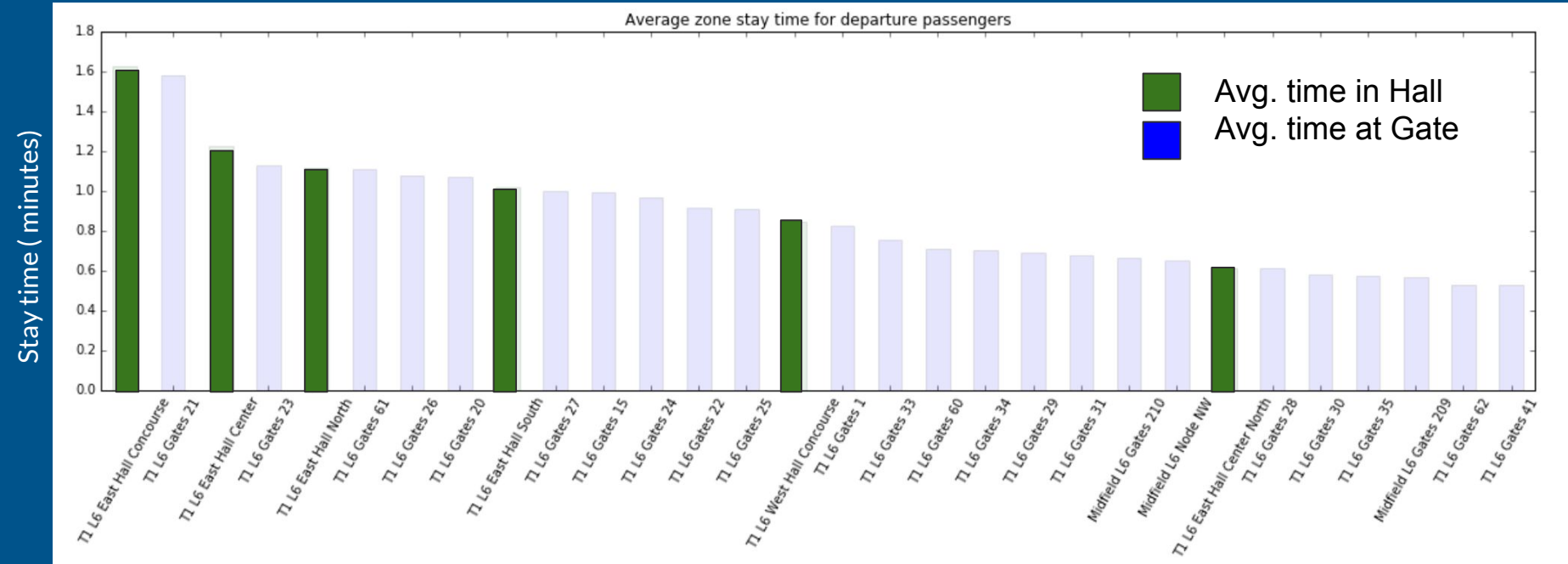
Unable to explore  
all food and retail options  
(No time/too lazy)

# Verification: stay time comparison



Gate Stay Time > Hall Stay Time

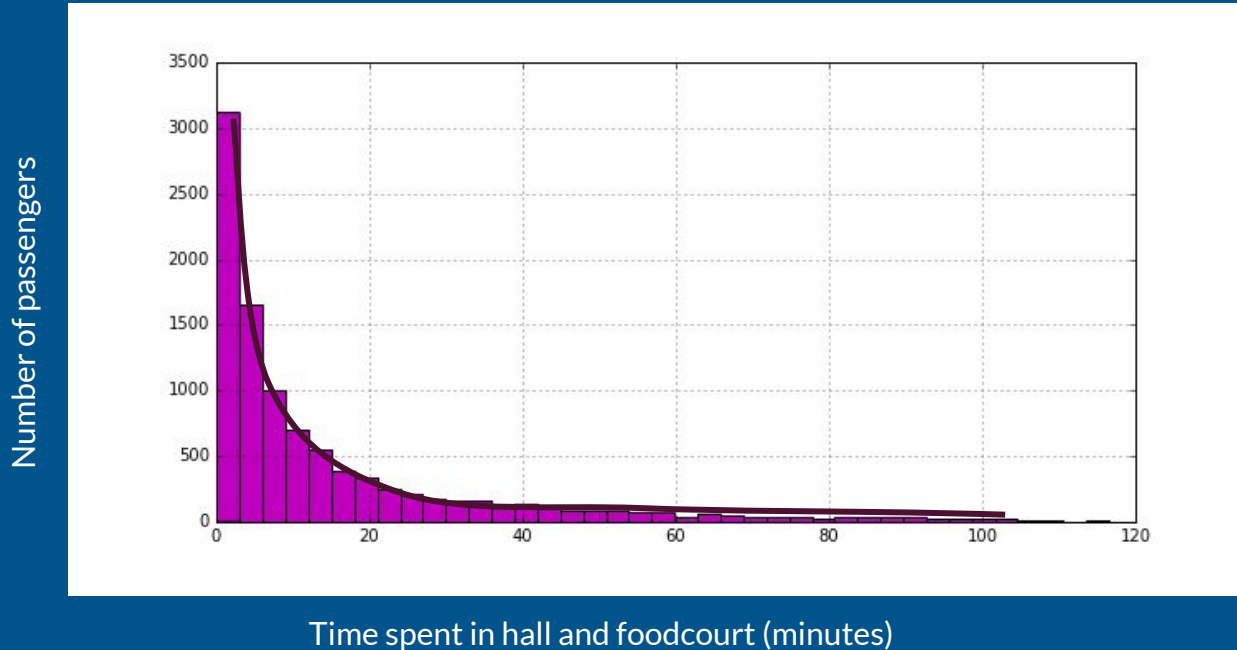
# Verification: stay time comparison



Zone names

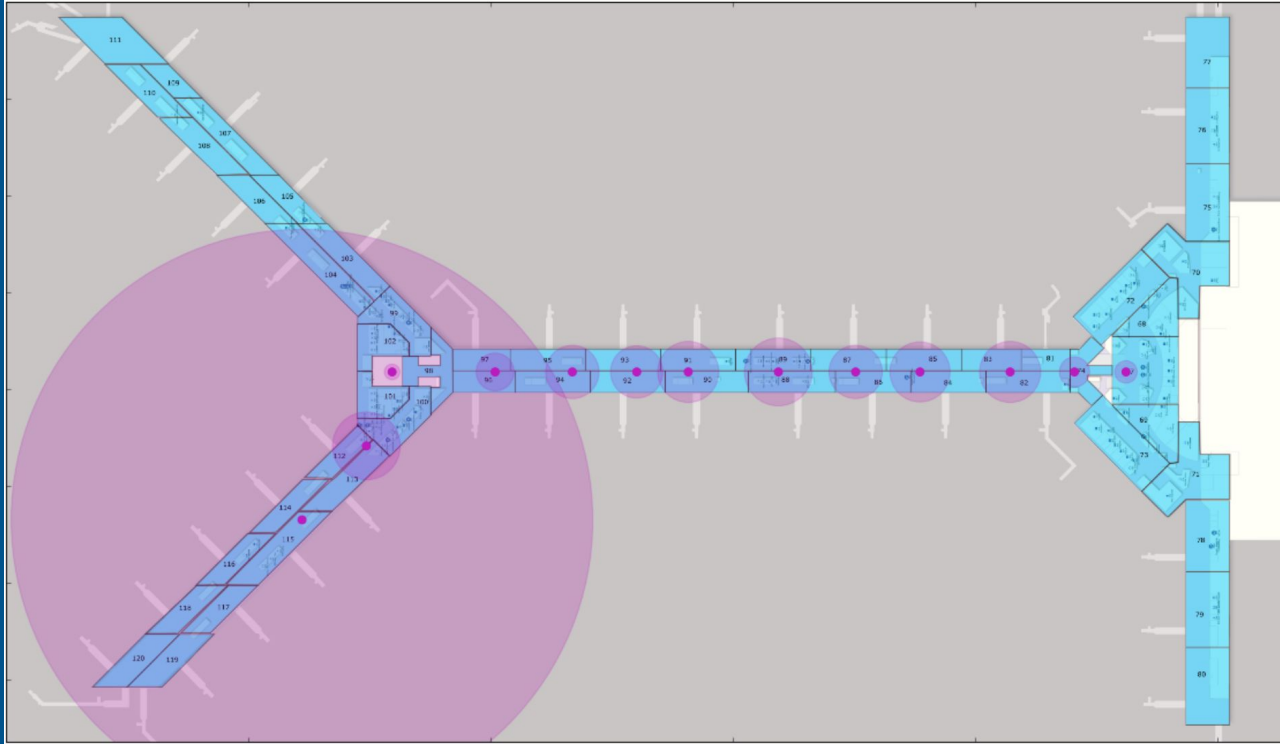
$$\frac{\text{Total Hall Stay Time}}{\text{Total Airport Stay Time}} = 0.209$$

# Distribution of time spent in hall



One half of passengers spend **less than 10 minutes** in hall

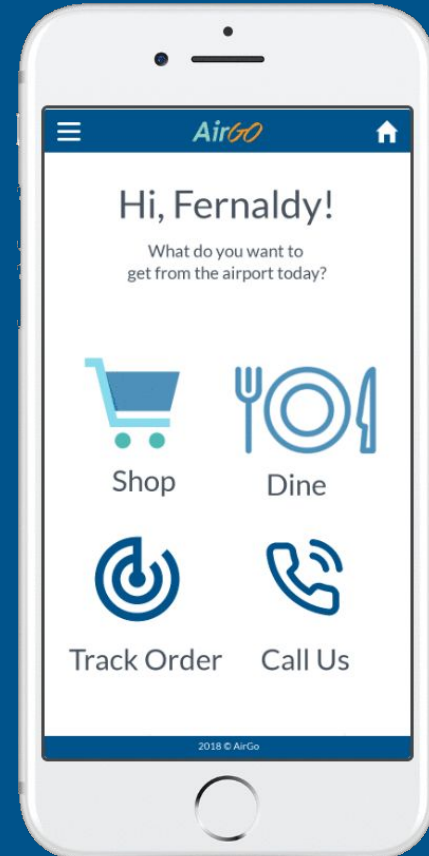
# Example: Journey of a passenger



- **Centre** of circles: **zones visited** by the passenger.
- **Size** of circles: **duration of time** spent in the zone.
- score of journey: 0.79

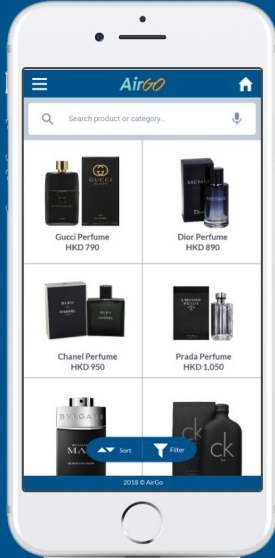
# Solution: AirGo

- An App that brings all the airport's shop to you
- Product type: internal e-commerce to eliminate the gap between customers and airport shops
- Target: Airport passengers seeking for convenience



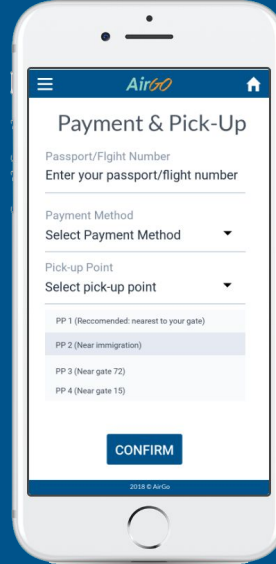


# AirGo features



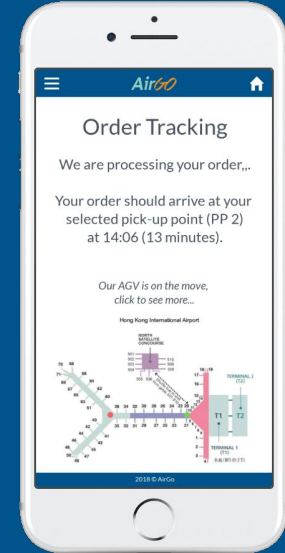
## Variety:

Order from any airport  
restaurants or stores



## Flexibility:

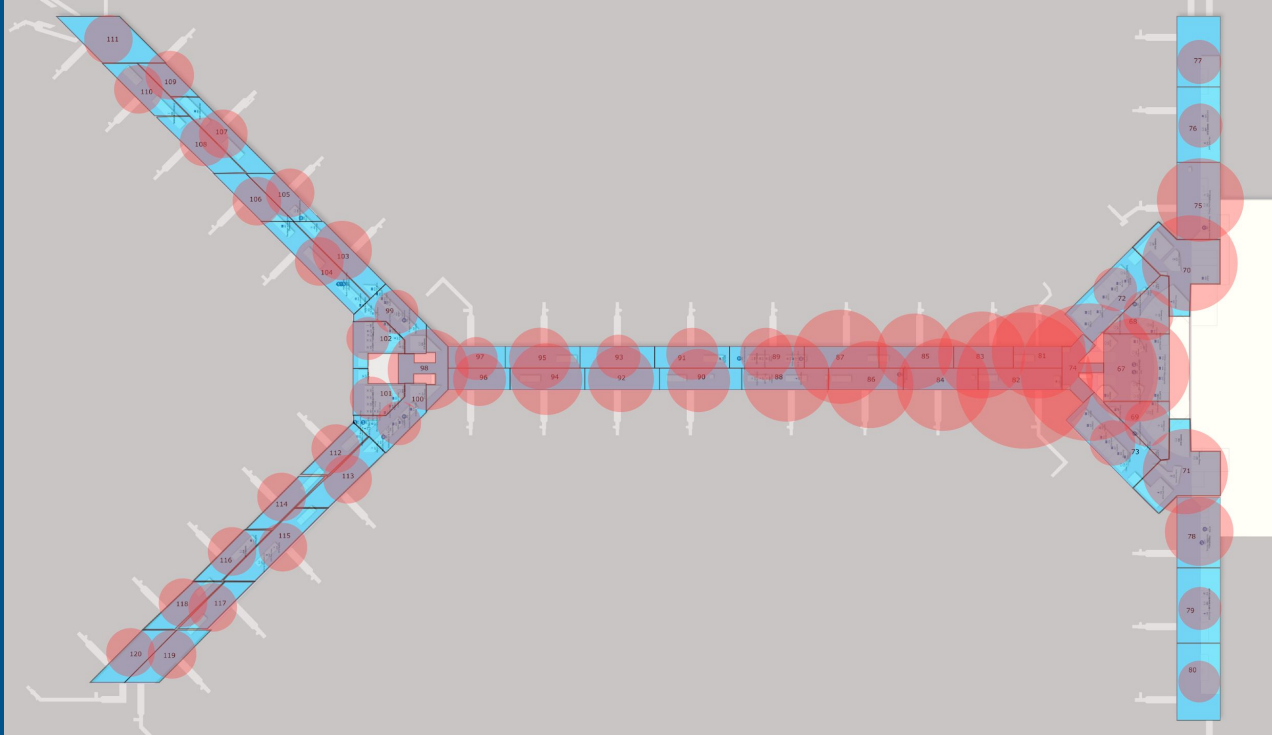
Choose pick-up point



## Visibility:

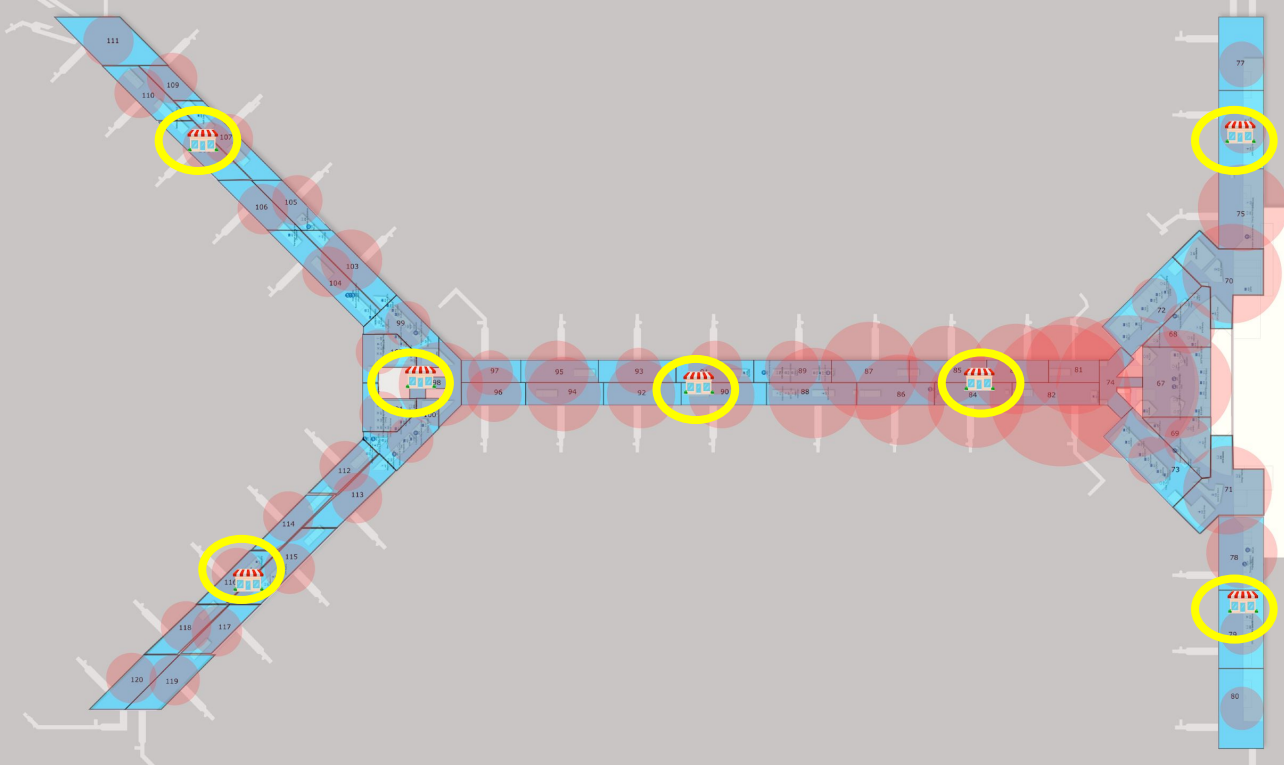
Customers can track the  
order movement

# Heatmap of different zones



- The real time concentration of passengers info
- Optimal deployment of pick-up point based on data analytics

# Distribution centers and AGV



Quantity: 7 Points



Quantity: 75 Units

# Why AirGo?



## Faster delivery service:

less time wasted  
with the help of AGV



## Increase accessibility

Place order ANYWHERE and  
pick-up conveniently

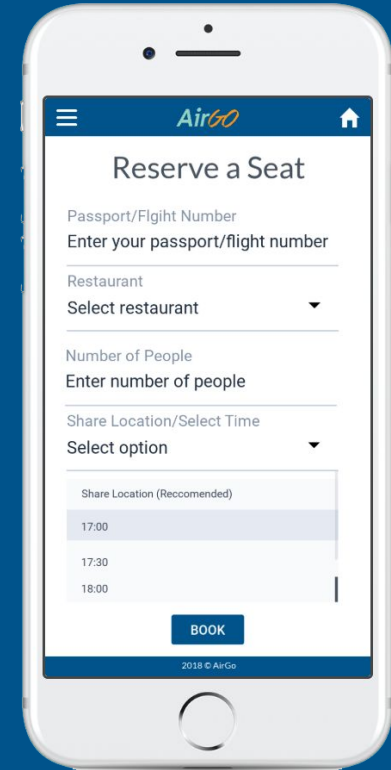


## Airport E-commerce

Support airport stores' sales.

# Further development

- For food services, options to book table is available.
  - Technology: Video analytics and machine learning
  - Capability: Real time management of table booking availabilities



# Financial consideration

Revenue: Delivery charge (HK\$5 fixed charge)

- Estimated number of maximum customer per day: 7520
- Estimated number of customer in year 1 per day: 3760
- Earning per year: HK\$ 6,862,000

Cost incurred: AGV, Distribution centre and additional staffs

- AGV: HK\$70,000 x 75 = HK\$ 5,250,000
- Distribution centre: HK\$ 50,000
- Additional staffs: HK\$ 2,584,000
- Total cost: HK\$ 7,884,000

Break-even point: **1.15 year**

# Conclusion

*By using the **data**, we acknowledge that due to various factors, the customers' time are underutilized which lead to the low shop exposure.*

*That is why we create AirGo that eliminates this gaps, **saving time**, shorten **walking distance**, and support airport sales.*

*AirGO*

*As you go.*