# PocketAirport - Feasibility Study

**Group 11**

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Agenda

Background
Functionality of our App
How can *PocketAirport* help?
*PocketAirport* as a persuasion tool?
Benefits of our App
Technology feasibility
Economic feasibility
Future development
Other similar products
Q&A
Agenda

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Problems you may face

- Where is the
  - Airline check in counter
  - Boarding gate
  - Washroom, etc.
- Too much time
  - Waiting for boarding
  - Stopover for hours
Problems you may face

- Language problems
Problems you may face

- It is too large
This is your solution!
Pocket Airport
- Your savior in airport
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How to get started?

- Free download from iOS / Android Apps store
- Any mobile devices (e.g. smartphones, tablets, etc.)
- Free Wi-Fi connection at Hong Kong International Airport
- E-Boarding pass or traditional printout boarding pass
How to operate?

- Launch the Apps as soon as arriving Hong Kong International Airport
- Scan your printout boarding pass or retrieve your e-boarding pass from your mobile devices
What will display on the Apps?

- Key airport and flight information
- Flight information (e.g. flight number, boarding gate, updated boarding time, etc.)
- Local time and remaining time before gate closing
- Visual display of current location in the airport and your boarding gate
- Directions and estimated time required to get to the boarding gate
- Alert on latest boarding status (e.g. final call)
What will display on the Apps?

- Entertainment and Shopping experience
  - User options:
    - **Dining** (e.g. fast food, special cuisine, takeaway, etc.)
    - **Shopping** (e.g. souvenirs, duty-free, bookstore, etc.)
    - **Other airport services** (e.g. airline lounge, baggage enquiry, tourist information, etc.)
  - Suggestions on dining and shopping outlets are based on user’s mobile browsing pattern and preference (e.g. Facebook history)
What will display on the Apps?

- Information about chosen outlets:
  - Store information and contact details
  - Visual display of the store location
  - Directions and travelling time required from the user’s current location
  - Time for enjoyment at the outlet calculated based on the travelling time required between current position, outlet and the boarding gate
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## Solution to the defined problems

<table>
<thead>
<tr>
<th>Problems</th>
<th>Solutions</th>
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| Lost in the airport       | • Airport Personal guide  
• Provide route and map for the locations (e.g. Check-in, luggage)  
• Keep track of the counterparts  
• Time-saving |
| Too much free time in the airport | • Recreations recommendations  
• Provide shopping, entertainment and restaurants information  
• Knowing what you can do nearby for time spending |
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**Persuasion**

- **Computers**
  - Mobile app
    - Download any-time, any-where
    - Graphical UI
  - Location-based service
    - Real-time connection

- **Persuasion**
  - Behavior Change
    - Better time management
    - More convenience
  - Motivation
    - Enhance “impulse purchasing”
    - Promote ad hoc activities to users
  - Attitude Change
    - More fun for waiting flights in airport
    - Upgrade the airport experience
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Benefits of the application

- Value to passengers:
  - Navigate everywhere in airport
  - Provide personalized suggestion on recreations
- Therefore
  - Serviced with care and intelligence
  - Have fun and entertainment
Benefits of the application

- Value to store owners:
  - Enable personalized marketing message
  - Attract more passengers
- Therefore
  - Strengthen brand recognition
  - Increase store revenue
Benefits of the application

- **Value to airport:**
  - Less customer services required
  - Enhance passengers satisfaction

- **Therefore**
  - Create delightful shopping and lifestyle experiences
  - Increase airport reputation
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Technology Feasibility

- Indoor positioning
  - iBeacons

iOS 7
iBeacons
Technology Feasibility

- iBeacons
  - Indoor positioning
  - Sending push notification
iBeacons

- Based on Bluetooth 4.0
- iOS
  - iPhone 4S and later, iPad (3rd generation) and later, iPad Mini (1st generation) and later, iPod Touch (5th generation)
- Android - with Bluetooth 4.0 and Android 4.3 and later
  - Samsung Galaxy S3/S4/S4 Mini, Samsung Galaxy Note 2/3, HTC One, Google/LG Nexus 4/Nexus 5, HTC Butterfly
- Over 200 millions devices already compatible
iBeacons

- Effective Range
  - Up to 50 meters
- Open standard
  - For both iOS and Android
- Retail price
  - USD 22~60
  - Cheaper when widely adopted
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Economic Feasibility

- Revenue
  - Sponsorship from Airport
  - Advertising fee from stores

- Cost
  - Mobile App development
  - Hardware
    - Network, servers
Economic Feasibility

- Cost
  - iBeacon
    - HK Airport Terminal 1
      - ~ 800 shops
    - Assume 1 iBeacon per shop
      - < USD 20,000
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Future Development

- Family Caring
  - Child & elderly could be tracked

- Benefits for Disables
  - Provide more information & routes for disables
  - New facilities could be spotted for needy person

- Luggage & Personal belonging tracking
  - Reduce the chance of lost of luggage
  - Time saving for locating the luggage
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Comparison with existing solution

- Google Map
  - No indoor navigation
  - Detailed information are not provided.
  - Lack of interaction

- iFly
  - GPS for navigation
  - Slow Loading time
References

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- http://kontakt.io/
- http://estimote.com/