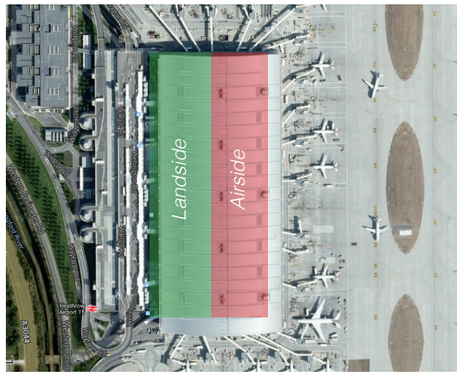
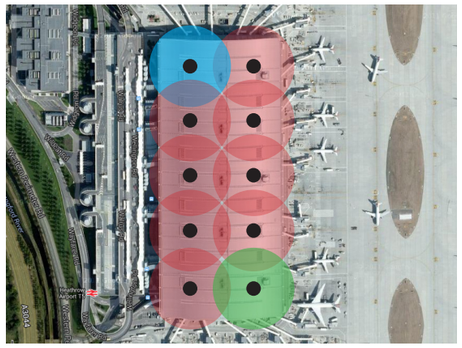
TRACKING

The Problem

Delayed or missing passengers cost the airline industry a total of **$600,000,000** per year due to the extortionate costs of grounding fees at airports. At present, airlines only know if a delayed passenger is either landside or airside (as seen in figure 2c). With no way of knowing exactly where a passenger is within the terminal building, it is impossible to schedule departures accurately. If airlines were to know a passenger's location they could then work out whether it was worth waiting on the passenger or to go without them. This would save airlines time and money while reducing delays for other passengers.

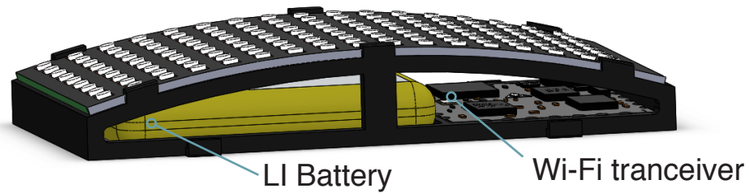


Solution



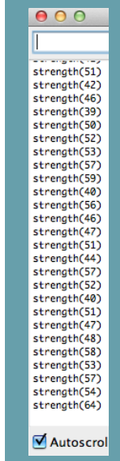
- *Beacon*
- *Signal range*
- *Passenger*
- *Gate*

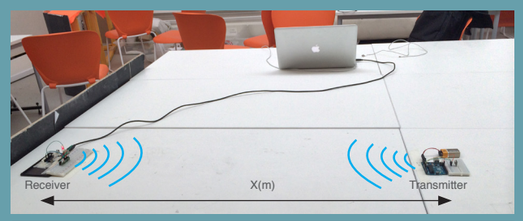
Internal Product Structure

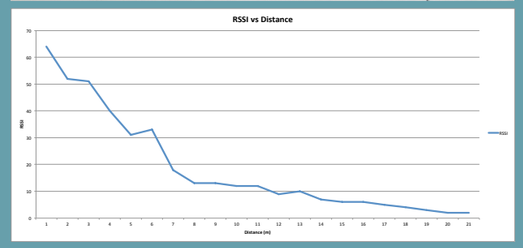


Indoor Positioning System

Passenger tracking is enabled for airlines and airports by using a series of indoor beacons which measure the received signal strength from near by Nova devices.







Several experiments were carried out to determine a method of tracking. Testing showed received signal strength indication (RSSI) varies logarythmically with distance. Using a transmitter and set of receivers a fully functional proximity based indoor positioning system was created.