



Operational Intelligence

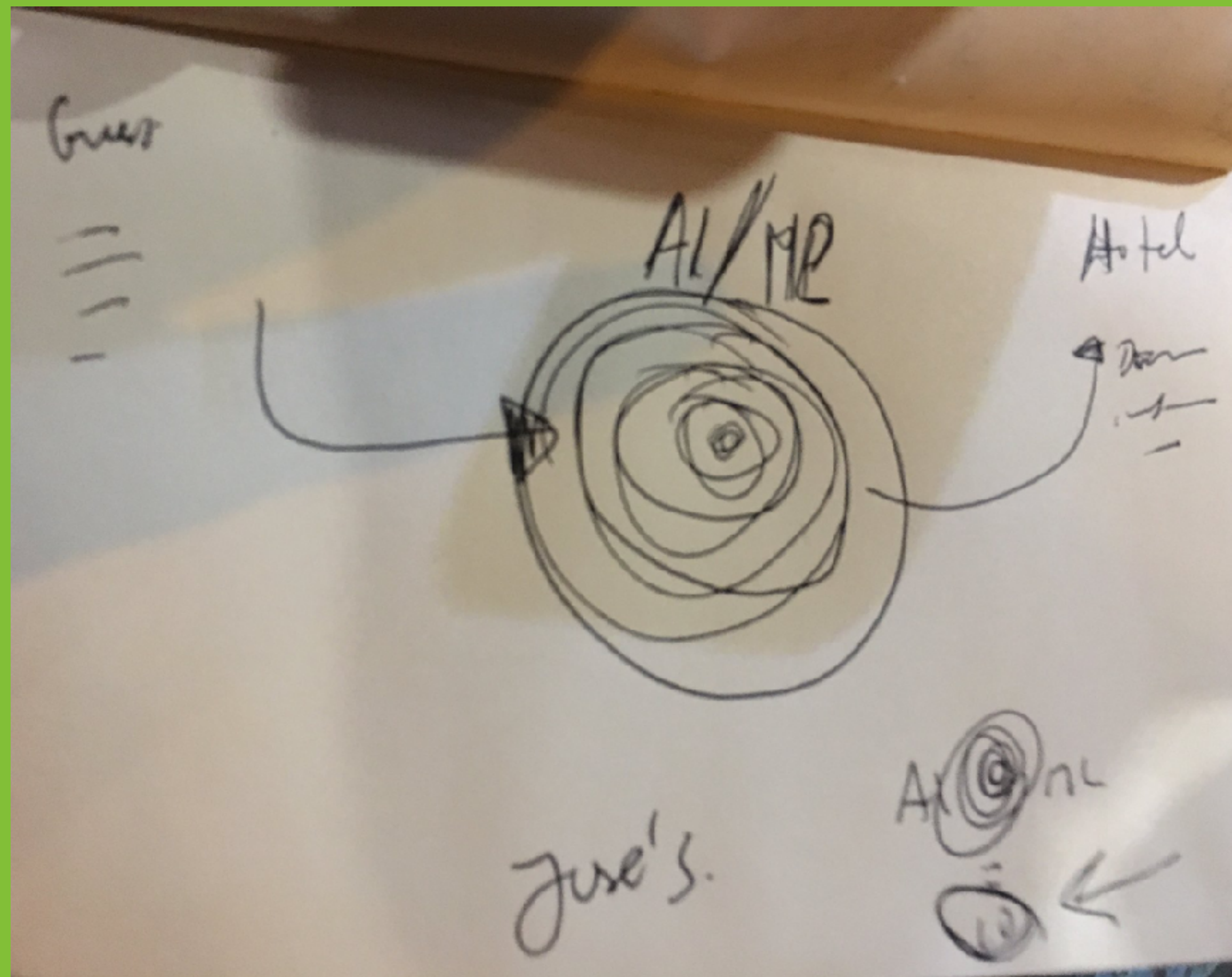
GUESTCENTRIC | EXPEDIA HACKATHON



GUESTCENTRIC

about #guestcentric

@_sergioserra @josedasilva @pedromsduarte @cunhaesilva



+



It all starts with a great idea...

code name "MacGyver"

Concept

OTAs have very high cancellation rates (up to 50%)

Pre-stay activity can reduce cancellation rate up to 70%

(source Tambourine)

Live Demo

Built from scratch from 8:30am of 25/4 to 3pm of 26/4



Operational Intelligence

GUESTCENTRIC | EXPEDIA HACKATHON

Concept

Relevant Data and Prediction for Smart Decisions

- Provide CompSet contextual information
- Provide Upgrade suggestions
- Provide a Cancellation probability score
- Live communication
- Provide Guest detail information and sentiment
- Live warnings
- Warn Hotel about Live Guest Sentiment
- Direct communication
- = secure good reviews

Technology

Expedia APIs used

- AWS
 - API gateway
 - LAMBDA functions
 - Node JS
 - Dynamo DB
 - Google Material Design
 - HighCharts
 - AngularJS
- Expedia QuickConnect Booking Retrieval & Confirmation API
 - VIP Booking (Experimental)
 - Gaia (Experimental)
 - Travel Content Service TCS (Experimental)
 - Hotel Review Analyzer (Experimental)
 - Marketplace Feed (Experimental)

Other APIs & Services used

GuestCentric Api's

- GuestCentric IBE Partner API

External Api's

- Twillio Rest API
- AWS SES Api - Email processing

Amazon Machine Learning Blackbox for Cancellation prediction

- User sentiment + User reviews + Cancellation history + Booking pace + Reservation type/date/value/occupation/source/location + VIP

Next steps

- **Create External service for Cancellation Prediction**
 - 2 way API to serve external partners
- **Dynamic CompSet**
 - Based on lost reservations
- **Fair Share V2**
 - Add local events (date / # attendees / local capacity) to the mix
- **Reviews DB Cube for deep analytics and AddOn recommendation**
 - Hotel / Guest / Room / Addons / Events / Date
- **Real Time Reviews**
 - API for external answers