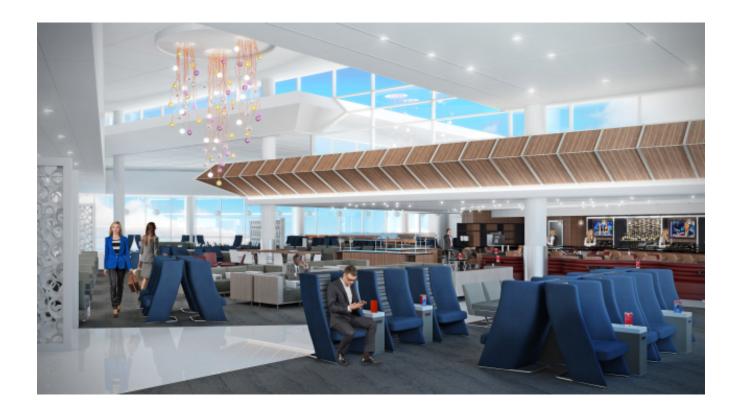
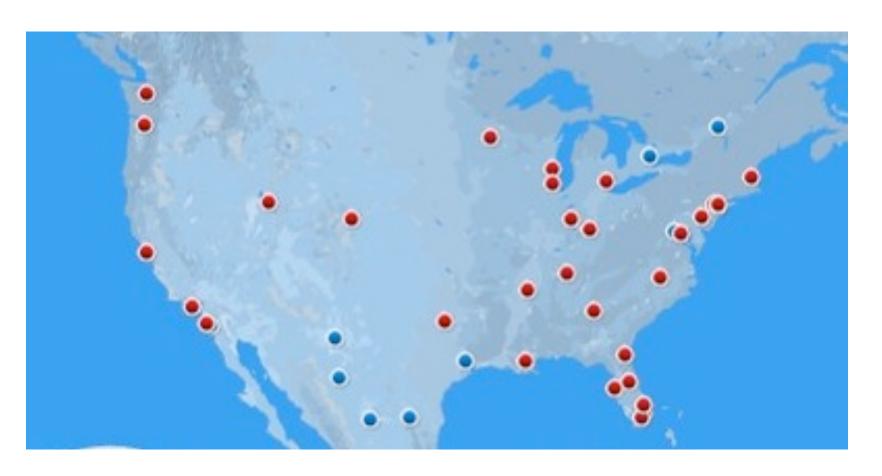
Estimating Occupancy Rates at Delta Sky Clubs



Emmanuel Carrier, Keith Becker & Liming Yao aka Sky Club Doctors

Turn Sky Clubs into a key element of the premium travel experience



- About 50 locations, almost all of them domestic
- Significant investment over the last few years (new locations, renovations, furniture, food...)
- Turn Sky Clubs into a key step of the premium travel experience and a differentiator with competitors

Access Policies

- Subscription and Inclusive
 - Sky Club Membership
 - Paid
 - Complimentary: Choice benefit for Diamond Medallion members
 - Ticket
 - International Business Class on DL and partners
 - Delta One in transcon markets
 - Loyalty Benefits
 - Skyteam Elite Plus on international itineraries (including in coach)
- Stand-alone Transaction
 - Single-Entry Pass (\$59)
 - Credit Card Partnerships
 - Complimentary: Delta Reserve, Amex Platinum & Centurion
 - Reduced Fee (\$29): Delta Platinum & Gold

Opportunity to increase both customer satisfaction and revenues

- Overcrowding is one of the top complaints in customer surveys
 - Observed/Perceived occupancy is higher than actual occupancy
 - Airports with multiple clubs represent 66% of Sky Club entries
 - Need approach to manage demand across clubs
 - Mitigating overcrowding should improve customer satisfaction and increase NPS
- Opportunity to increase revenues
 - Single-entry pricing set at \$59 to discourage demand
 - It works: only 5 daily entries per club
 - Occupancy varies widely across locations and TOW



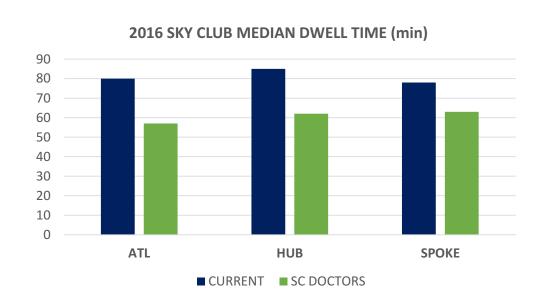
Estimating Occupancy Rates

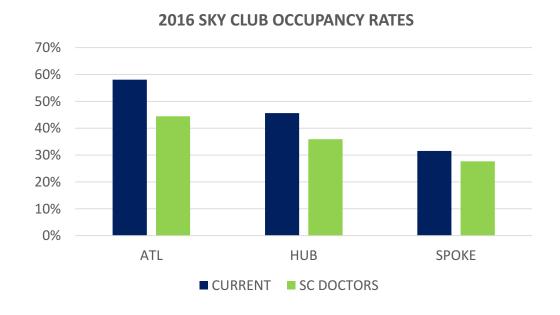
- Need to estimate when customers leave the Sky Club
 - Very accurate recording of Sky Club entries
 - Exits from Sky Club are currently not recorded
 - Hardware solutions somewhat immature and expensive to deploy (employees, luggage...)
 - Current estimates of dwell time are based on scheduled flight departure times and might be inaccurate
 - Opportunity to improve by leveraging available data sources

More accurate estimates of occupancy rates

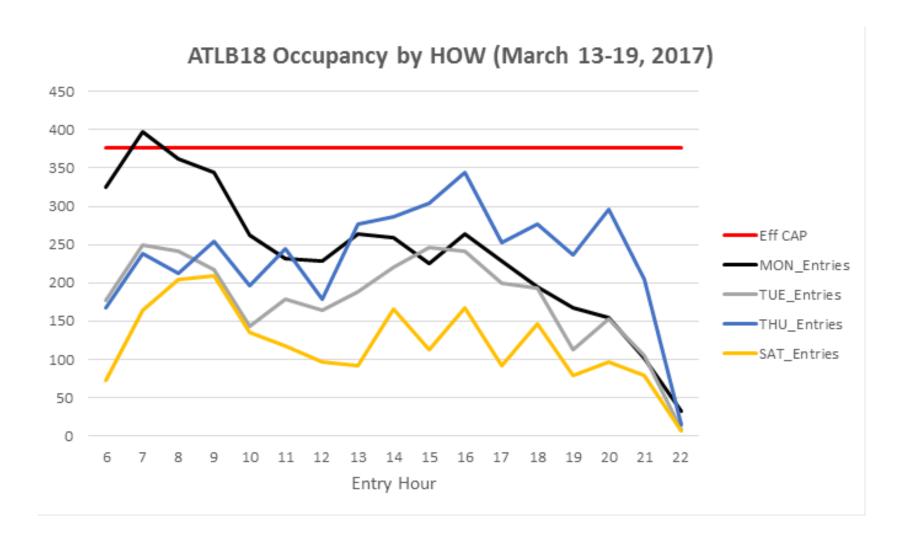
- Current approach is uniform and simplistic
 - Scheduled flight departure time 15 minutes
- Our approach is to leverage multiple existing data sources
 - Sky Club entry scans
 - Boarding time scans
 - 95+% match rate
 - Codeshare partner entries
 - Entries on arrival
 - Boarding time 15 minutes

Current approach over-estimates dwell time and occupancy rates





Demand varies a lot by TOW



Visualization prototype

mitigate overcrowding through occupancy display and pricing at peak times



3/19/18

Increase Revenues through messaging and dynamic pricing at slow times

3/19/18

- Push notifications through the Delta fly app
 - Amex credit card holders
 - Free trial for first-time customers, especially emerging highvalue customers and millenials
- Dynamic Pricing for day passes and guest access
 - Vary day pass pricing based on occupancy estimates
 - Special offers such as BOGOs for guest access
- Estimate **\$20-30M** revenue potential
 - Increase day pass and paid guest access by 1M
 - High-margin business with low variable costs



Next Steps

- More granular estimate of club departure time
 - Vary based on club location relative to boarding gate
- Dynamic Pricing for day pass and guest access
 - Vary Pricing by Club and TOW based on historical occupancy: peak, shoulder and off-peak
 - Dynamic Pricing and Offer Generation based on real-time occupancy

Thank you

Questions?

