Building Venue Intelligence:
Harnessing wireless data to understand fan behavior & generate revenue
Athletics Revenue: main sources
Future Vision: optimization

Data Warehouse
- Name / Email
- Ticket purchase
- Campaign history
- Demographic

Wireless data
- Device data
- Network data

Usage Data
- Movement - time
- DNS – Content
- Ticket Scan
- POS Data

Interventions
- Personalization
- Proximity / push
- Service / operations
- Promotion / contest

Desired Outcome
- Customer acquisition
- Renew / repurchase
- Upsell / cross sell
Current Problem: anonymous fans
Opportunity: Venue intelligence
National Sports Forum 2017
Wi-Fi Access Points: Like Beacons, Only Better
Visualizing the Fan Journey
Visualizing the Fan Journey

Wi-Fi Portal: Marketing Inside the Fan Journey

- **Game Date:** Oct. 15, 2016
- **Visitor Type:** New
- **Entrance:** Gate 10
- **Seating Section:** Level 6, Sec. LL
- **Data Consumed:** 20Mb, 5Mb
- **Mobile OS:** iOS

- **Overall Dwell Time:** 4h 15m
- **Bowl Dwell Time:** 3h 26m
- **On Concourse:** 41m
- **Trips to Concourse:** 2
- **Total Movement:** 40,395
- **Exit Gate:** Gate 6
Wi-Fi Database Schema

(please don’t ask me to explain)
MAC ID shows attendance frequency

64% of all devices detected were seen at just 1 of 7 home games.

Sample Size
Wi-Fi captured ID for 119,735 devices (net), which is about 31% of all TOTAL NET fans during season.

N = 119,735
**Net Attendance:** identify target for upper deck

**Total ticket sales (Gross Season):** 698,988

<table>
<thead>
<tr>
<th>Frequency</th>
<th>SHARE</th>
<th>NET FANS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Game</td>
<td>64%</td>
<td>247,085</td>
</tr>
<tr>
<td>2 Games</td>
<td>15%</td>
<td>58,178</td>
</tr>
<tr>
<td>3 Games</td>
<td>8%</td>
<td>32,499</td>
</tr>
<tr>
<td>4 Games</td>
<td>5%</td>
<td>19,168</td>
</tr>
<tr>
<td>5 Games</td>
<td>3%</td>
<td>12,987</td>
</tr>
<tr>
<td>6 Games</td>
<td>2%</td>
<td>9,190</td>
</tr>
<tr>
<td>7 Games</td>
<td>2%</td>
<td>5,900</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>385,008</strong> Net Fans</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.816 Games/Season</td>
</tr>
</tbody>
</table>

Key target for single game sales
But still anonymous
Email Promo: Black Friday

60,000 Emails sent

- Over 400 tickets sold in the first 5 minutes.
- Over 700 tickets sold in the first 10 minutes.
- Over 1,000 tickets sold in the first 20 minutes.
- 1,400 tickets sold in the first hour.
- 2,283 tickets sold (761 transactions @ 3 tix ea.)
- $136,980.00 in revenue

1% Conversion rate (discounted tix)
Fan Segments: MAC ID + Email

Wi-Fi Users by customer segment

- Fans, 76%
- Students, 19%
- STH, 5%

Attendance Frequency by customer segment

- Student: 3.1
- STH: 4.4
- Fan: 1.9
- Average: 2.2 (non weighted)
DNS Lookup: valuable, but LARGE DATA SET
DNS inspires New Service: HTML5 app
Monetizing the Fan Journey

**Proximity Campaigns: Location + DNS + Fan ID = $**

**WHO**
- Season ticket holders
- Team app users
- Other app users: Snapchat, FB, etc.
- New/returning visitors
- Early or late arrivers
- And more

**WHERE**
- On concourse
- In clubs
- At sponsor location
- Post game
- On skyway
- At retail (custom)*
- At partner locations: Mall of America, US Bank, etc.*

**HOW**
- Via App
- Via Email
- Via SMS
What’s stopping us?

1. **Location challenges** – need to map A.P. groups (commercial points)
2. **DNS data too big** – storing lookups can hinder portal performance
3. **Analysis road blocks** – need computer power + A.I. gain insight