TICKETING INDUSTRY

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AEM 4160 Final Presentation
There is a lot of confusion surrounding how tickets are priced – we often wonder when to buy tickets, how to get the best “bang for your buck” in terms of seats, and how ticket pricing is determined.
1. General Practices and Trends

2. Sports Industry
   - SPEC Tickets
   - Re-sellers
   - Analysis: Dynamic Pricing

3. Concert Industry
   - Dynamic Pricing
   - Concert Promoters
   - Secondary Market
   - Analysis: Advance buying effect on ticket prices

4. Broadway
   - Supply Chain
   - 2nd Degree Price Discrimination
   - 3rd Degree Price Discrimination
   - Peak-Load Pricing
   - Analysis: Seasonality and Occupancy Rates
Overview

Online Event Ticket Sales Industry

$4.1B Revenue
Overview

Online Event Ticket Sales Industry

$4.1B Revenue

Ticketing in Sports 22%
Ticketing in Concerts 53.5%
Ticketing in Broadway 14.5%

Summary
### Capacity Constraints and Demand Uncertainty

#### Demand Uncertainty

Many consumers are unable to plan ahead of time, and event hosts cannot predict exactly how many tickets will be demanded.

#### Capacity Constraints

A venue can only hold so many guests – hosts cannot simply produce more seats when demand is high.

#### Perishable Goods

Once the concert begins, the value of the ticket drops to zero.

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**Complex Ticket Marketplace**

<table>
<thead>
<tr>
<th>Section</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>$359</td>
</tr>
<tr>
<td>A/C</td>
<td>$149</td>
</tr>
<tr>
<td>B2</td>
<td>$134</td>
</tr>
<tr>
<td>D/E</td>
<td>$120</td>
</tr>
<tr>
<td>F/G</td>
<td>$114</td>
</tr>
<tr>
<td>H/J</td>
<td>$63</td>
</tr>
</tbody>
</table>

Ticketing in Concerts

Ticketing in Sports

Ticketing Overview

Ticketing in Broadway

Summary
Scalping and Secondary Markets

Ticket Scalping

If original prices do not match consumer willingness to pay, the prices on the secondary market adjust to reflect demand.

Dynamic pricing aims to combat this.
SPORTS

Ticketing Overview

Ticketing in Sports

Ticketing in Concerts

Ticketing in Broadway

Summary
Sports Industry Overview

Ticketing Overview

Ticketing in Sports

Ticketing in Broadway

Ticketing in Concerts

Summary

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Sports Teams

Primary Ticket Providers

Customers

Ticket Speculators

Ticket Resellers

Customers
Secondary vs. Primary Market

MLB Primary Ticket Sales
$6.8 billion

Secondary Ticket Sales
$2.5 billion

Secondary Ticket Sales by MLB teams <$10m

Ticketing Overview
Ticketing in Sports
Ticketing in Concerts
Ticketing in Broadway
Summary
Secondary Market: “Spec Tickets”

**Impact**

These may be sold weeks or even months before an event, long before real tickets go on sale.

One potential side-effect of rampant ticket speculation is a “short squeeze”.

![Impact Diagram](chart.png)

**A Super Bowl ‘Short Squeeze’**

Daily average Super Bowl ticket resale prices by days until game

- **2014**
- **2012**
- **2011**
- **2013**
- **2015**

*Source: SeatGeek*
<table>
<thead>
<tr>
<th>Partnerships</th>
<th>“Purple Pricing”</th>
<th>Dynamic Pricing</th>
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<tbody>
<tr>
<td>Teams are hoping to bring their competitors into the primary market with sponsorships and revenue-sharing</td>
<td>Northwestern has implemented a new pricing model based on Dutch Auctions, called “Purple Pricing”</td>
<td>Ticket vendors are turning to dynamic pricing in order to account for market uncertainty and better meet consumer demand</td>
</tr>
</tbody>
</table>
St. Louis Cardinals Dynamic Pricing

- Pricing varies by seat location – better seats are more expensive
- Pricing also varies based on the game itself – some games are more expensive
  - Opponent?
  - Weather?
  - Temperature?
  - Pitching?
  - Time of Day?
  - Day of the Week?

[Graph showing price variations by seat location and game details]
## St. Louis Cardinals Dynamic Pricing

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunday 5/1</td>
<td>STL</td>
<td>Monday</td>
<td>1:15</td>
<td>Martinez (28)</td>
<td>Ross (62)</td>
<td>Ice Cream</td>
<td>81</td>
<td>Sunny</td>
<td>$91.72</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monday 5/2</td>
<td>STL</td>
<td>Tuesday</td>
<td>7:15</td>
<td>Wainwright (24)</td>
<td>Hellickson (172)</td>
<td>Tote Bag</td>
<td>76</td>
<td>Cloudy</td>
<td>$61.30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuesday 5/3</td>
<td>STL</td>
<td>Wednesday</td>
<td>7:15</td>
<td>Wacha (30)</td>
<td>Nola (65)</td>
<td>Replica World Series Ring</td>
<td>72</td>
<td>Rain</td>
<td>$64.20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wednesday 5/4</td>
<td>STL</td>
<td>Thursday</td>
<td>7:15</td>
<td>Leake (67)</td>
<td>Morton (177)</td>
<td>Mostly Sunny</td>
<td>80</td>
<td>Mostly Sunny</td>
<td>$62.30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thursday 5/5</td>
<td>STL</td>
<td>Friday</td>
<td>7:15</td>
<td>Garcia (60)</td>
<td>Eickhoff (78)</td>
<td>Sunshine</td>
<td>81</td>
<td>Sunshine</td>
<td>$80.31</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friday 5/6</td>
<td>STL</td>
<td>Saturday</td>
<td>1:15</td>
<td>Martinez (28)</td>
<td>Liriano (26)</td>
<td>Mostly Sunny</td>
<td>75</td>
<td>Mostly Sunny</td>
<td>$91.71</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Saturday 5/7</td>
<td>STL</td>
<td>Sunday</td>
<td>1:15</td>
<td>Wainwright (24)</td>
<td>Cole (12)</td>
<td>Ice Cream</td>
<td>76</td>
<td>77</td>
<td>$109.14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sunday 5/8</td>
<td>STL</td>
<td></td>
<td></td>
<td>Wacha (30)</td>
<td>Niese (115)</td>
<td></td>
<td></td>
<td></td>
<td>$87.53</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Ticketing Overview**

**Ticketing in Sports**

**Ticketing in Concerts**

**Ticketing in Broadway**

**Summary**
<table>
<thead>
<tr>
<th>Section</th>
<th>Mean</th>
<th>SD</th>
<th>SD/Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardinals Club ABC</td>
<td>$231.31</td>
<td>$25.73</td>
<td>0.111</td>
</tr>
<tr>
<td>Diamond Box</td>
<td>$118.78</td>
<td>$31.10</td>
<td>0.262</td>
</tr>
<tr>
<td>Bank of America Club*</td>
<td>$112.84</td>
<td>$31.18</td>
<td>0.276</td>
</tr>
<tr>
<td>Home Field Box</td>
<td>$80.15</td>
<td>$23.78</td>
<td>0.297</td>
</tr>
<tr>
<td>Infield Field Box</td>
<td>$67.28</td>
<td>$20.87</td>
<td>0.310</td>
</tr>
<tr>
<td>Dugout Box</td>
<td>$66.78</td>
<td>$18.89</td>
<td>0.283</td>
</tr>
<tr>
<td>1st and 3rd Base Field Box</td>
<td>$50.40</td>
<td>$16.12</td>
<td>0.320</td>
</tr>
<tr>
<td>Left Field Porch</td>
<td>$39.65</td>
<td>$17.22</td>
<td>0.434</td>
</tr>
<tr>
<td>1st Base Pavilion</td>
<td>$28.53</td>
<td>$ 9.55</td>
<td>0.335</td>
</tr>
<tr>
<td>Right Field Terrace</td>
<td>$14.56</td>
<td>$ 4.57</td>
<td>0.314</td>
</tr>
</tbody>
</table>

*includes food and drinks
CONCERTS
A Breakdown of Concert Ticket Prices

**Ticketing Overview**

**Ticketing in Sports**

**Ticketing in Broadway**

**Ticketing in Concerts**

**Summary**

In the 60’s and 70’s:

- **Artists**
  - Manager/Agent
  - 60-75% of Profits

- **NYC Promoter**
  - NYC Venues
  - Box Office Tickets @ FV
  - Pay Fixed Fee

- **LA Promoter**
  - LA Venues
  - Box Office Tickets @ FV

- **Miami Promoter**
  - Miami Venues
  - Box Office Tickets @ FV

- **15% of Profits**

60-75% of Profits

10-25% of Profits

15% of Profits

Pay Fixed Fee

60-75%

10-25%

15%

of Profits

of Profits

of Profits
A Breakdown of Concert Ticket Prices

Today:

- Artists
  - 85% of Profits

- Manager
  - 15% Commission

- Agent
  - 10% Commission

- Promoter & Ticketing

- Marketplace
- Consumers and Brokers

- NY Venues
  - NYC Venue
  - LA Venue
  - Miami Venue
Are the Artists to Blame?

- Younger artists → multi-million dollar contracts
  - i.e. Jay Z and Taylor Swift
  - Get set amount from giving all selling rights to promoter
  - Lose say in final pricing
  - Charge as much as the market will bear
  - Primary prices are high

- Older artists → Try to keep their prices low
  - i.e. Bruce Springsteen
  - Loyal to their original fans
  - Try to keep prices low
  - This increases sales on secondary market (prices rise even more)
Secondary Markets and Re-Sale Tickets

• In 2007, New York State legalized ticket reselling to help supply meet demand
  • Decreased scalping tremendously

• $4.5 billion business

• Scalpers now work online - create “bots” to buy up tickets → re-sell to meet consumer demand

• Was lessened with introduction of dynamic pricing – yet still prevalent

• Impossible to avoid in an industry like ticket sales
# Breaking down Cost of Concert Ticket

<table>
<thead>
<tr>
<th><strong>Talent Compensation</strong></th>
<th><strong>Service Fees &amp; Show Costs</strong></th>
<th><strong>Show Costs</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Artists take 75-90% of the ticket price</td>
<td>Convenience fee/charge and order processing fee: promoter/ticketing</td>
<td>Facility charge: Concert Venue</td>
</tr>
</tbody>
</table>

- **2%-20% buyer fees** (depending on popularity, location, timing, etc. of show)
- **15% seller fees**

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**Ticketing in Concerts**

- **Ticketing Overview**
- **Ticketing in Sports**
- **Ticketing in Broadway**
- **Summary**
How can we fix these problems?

- Artists Take Action
  - Comedian Louis CK – Voids all tickets he found on resale websites

- Role of Technology
  - Increased illegal downloads on Spotify and Pandora taking away revenue from artists
  - Decrease illegal downloads – they wont have to charge so much on tour
When to Buy

Las Vegas Concert Ticket Prices

Days until Show

Average Ticket Price in Dollars

Ticketing Overview  Ticketing in Sports  Ticketing in Concerts  Ticketing in Broadway  Summary
When to Buy

Rihanna 4/30
Billy Joel 4/30

Sharp decline just before the show – value to ticketholder falls to zero as soon as show begins

All prices well above face value ($146 for Rihanna, $225 for Billy Joel)
Broadway Theatres

Ticketing Overview

Ticketing in Sports

Ticketing in Broadway

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Ticketing in Broadway

Summary
Supply Chain

**Theatre Owner**
- Rents theatre

**Show Producer**
- Sets ticket price

**Consumer**
- Purchases tickets

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Ticketing Overview  
Ticketing in Sports  
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### Ticketing in Broadway

#### Full-price vs. Discounted Tickets

- Individuals in a higher income class will pay full price.

- Individuals in a lower income class (i.e., students, unemployed actors and tourists) prefer to wait in line at discount booth such as TKTS.

#### Seat Quality and View

- Different prices offered for varying seat qualities and views (i.e., stand-for-cheap and partial-view seats).
2\textsuperscript{nd} Degree Price Discrimination: TKTS

- Offer unsold tickets at discounts of 20\% - 50\% of regular price
  - Additional $4.00 per ticket service charge
- Consumers who desire a discounted ticket must go to ticket window, such as TKTS and wait in line
  - Inconvenient
  - Time-consuming
- TKTS Mobile App
### 3rd Degree Price Discrimination

#### Ticketing Overview

<table>
<thead>
<tr>
<th>Student Rush Tickets</th>
<th>Wednesday Matinee Discounts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Require Valid student IDs</td>
<td>10%-50% Discount designed for local retirees and Senior Citizens</td>
</tr>
<tr>
<td>Cost between $20 and $30</td>
<td></td>
</tr>
</tbody>
</table>

- **Student Rush Tickets**
  - Require Valid student IDs
  - Cost between $20 and $30

- **Wednesday Matinee Discounts**
  - 10%-50% Discount designed for local retirees and Senior Citizens
Demand Seasonality

"Broadway Ticket" Searches on Google

- Mirrors USA patterns
- Peaks in holiday and summer months
- Peaks at tourist times (?)

Ticketing Overview
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Regional Seasonality

Google Searches from Australia

- Mirrors USA patterns
- Peaks in holiday and summer months
- Correlation with travel plans
Most revenue during peak Christmas season – while searches peak in the summer, perhaps customers are planning their trips for Christmas.
Pricing by Show

March 2016

Extremely popular shows have no need to discount and can keep prices high with sold out theatres.

Inelastic demand for popular shows, elastic for unpopular shows.
Artists/Teams/Shows taking control of their ticket sales
Cut out secondary market

Purple Pricing – Northwestern University
Prices may go down over time based on consumer demand but will never go back up

Technology (Concert Industry)
Equitable pay to artists & end to piracy

Limits on Purchase Quantity
To reduce chance of mass scalping

Dynamic Pricing
To raise artist/venue/team profits, reduce scalping
References

Sports

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Raw Data

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Questions