December 2020

Understanding Collegiate Football Ticket Prices

Ken Miller
dmile83@vols.utk.edu

Follow this and additional works at: https://trace.tennessee.edu/eureca

Part of the Business Analytics Commons, and the Sports Management Commons

Recommended Citation

Miller, Ken, "Understanding Collegiate Football Ticket Prices" (2020). EURēCA: Exhibition of Undergraduate Research and Creative Achievement.
https://trace.tennessee.edu/eureca/1

This Article is brought to you for free and open access by the Supervised Undergraduate Student Research and Creative Work at TRACE: Tennessee Research and Creative Exchange. It has been accepted for inclusion in EURēCA: Exhibition of Undergraduate Research and Creative Achievement by an authorized administrator of TRACE: Tennessee Research and Creative Exchange. For more information, please contact trace@utk.edu.
Research Problem
• Develop a choice model framework to understand customers’ purchase behaviors on the primary and secondary markets

Data
3.29 million rows of proprietary ticket purchase data from primary and secondary (VividSeats) markets provided by a college Athletic Department (AD)

Method
• Variable Importance Chart using Boruta package in R
• Multinomial Logit Choice Model using R
• Visualizations using Tableau

Results
• Secondary Market prices are driven by seat location and game attractiveness
• Team performance plays major role in resale/original price difference
• Sitting anywhere in the lower bowl is more favorable than sitting in the best seat in the upper bowl
• East direction is the least favorable section among season ticket alumni, donor, and faculty segments
• Further questions for this research to explore is how these choices vary in the secondary resale market and generating a pricing model to aid AD in future football ticket pricing decisions

<table>
<thead>
<tr>
<th>Segment</th>
<th>Distance</th>
<th>DirectionN</th>
<th>DirectionS</th>
<th>DirectionW</th>
<th>Price*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alumni</td>
<td>-2.22</td>
<td>0.95</td>
<td>0.43</td>
<td>0.38</td>
<td>0.07</td>
</tr>
<tr>
<td>Donor</td>
<td>-1.43</td>
<td>0.72</td>
<td>0.02</td>
<td>0.46</td>
<td>0.09</td>
</tr>
<tr>
<td>Faculty</td>
<td>-2.16</td>
<td>1.51</td>
<td>1.53</td>
<td>0.77</td>
<td>0.01</td>
</tr>
<tr>
<td>Other</td>
<td>-1.00</td>
<td>0.90</td>
<td>0.82</td>
<td>-0.23</td>
<td>-0.01</td>
</tr>
</tbody>
</table>

* Average Price has decreased from 2015-2019, potentially resulting in these estimates