

teaching note

Revenue Management and the Runnin' Rebels: A Case Study of Willingness to Pay for College Sports

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Case Study Summary

This case study presents pricing information related to the opening of a new football stadium for the UNLV Runnin' Rebels. With the relocation of the Raiders from Oakland to Las Vegas, UNLV Athletics was able to secure the rights to play their college football games in the new Allegiant Stadium, which is both state of the art and closer to campus than the previous stadium. The case study outlines a survey conducted of UNLV alumni and season ticket holders to determine the optimal ticket prices for the first season. The survey asked about their willingness-to-pay for different sections of the stadium. The participants were asked what they expected to pay for a single game ticket, what price would be expensive but they would still attend, and finally what price would be so expensive that they would not purchase. The exhibits then provide the students with the breakdown of the results.

Teaching Objectives and Target Audience

This teaching note is written for an undergraduate audience; however, it could also be adapted to a graduate student audience. This teaching case can be used in a revenue management course. For revenue management, this case study would be best partnered with a textbook chapter related to willingness-to-pay and differentiated pricing. There are also suggestions as to how this case study could be related to demand-based pricing. Please see the suggested classroom strategies below.

1. Recognize how different sections in the stadium impacted willingness-to-pay and correlate this to different parts of hospitality.
2. Recall the principles of willingness-to-pay presented in the course and compare them to the results of the case study.
3. Organize the ticket prices for the stadium based on the willingness-to-pay and relate this activity back to differentiated pricing.

The evidence presented in the case study in the graphs and charts at the end of the case study should be heavily relied upon for the objectives presented above.

Recommended Teaching Approach and Strategy

To achieve these objectives, the instructors have a variety of options open to them. In addition to the discussion questions provided in the case study itself, we provide a series of additional strategies to be used in the classroom. This teaching note provides suggestions for both in-person and online learning.

In-person learning

This case is designed to be used during one class period (75 minutes). The case should follow a discussion of willingness-to-pay and/or differentiated pricing. It is assumed that before reading the case study, the students will have a sufficient knowledge of revenue management concepts and definitions to understand the concepts presented in the case study. The students should be asked to read the case study prior to the class. Then, the instructor may present the case to the class and ask

check for understanding questions during the presentation. Alternatively, depending on the class size, the students may present different parts of the case to the class. Student could work in small groups and break the case up in the following manner for presentation purposes. The following layout would also be appropriate for the instructor to follow.

- Introduction to the case
- History of UNLV football and Allegiant Stadium
- Willingness-to-pay and college sports
- Description of the case and collection methods
- Description of the results

For objective 1, there are two recommended in-class activities. First, the students may work together in small groups to discuss how the three categories of price (expect to pay for a single ticket; expensive but still would attend; too expensive and would not attend) varied by the area of the stadium. Then, they would be asked to relate to this other hospitality products and services. A second proposed activity would be to have the students take a mock version of the survey to find out their own preferences for a sport of your choice at a venue of your choice. Then, debrief the results of the survey and discuss how income can affect willingness-to-pay.

“Sample Survey”

Now it's your turn! Imagine that we are pricing student tickets for _____ (name of sport) at _____ (name of venue). Please answer the following questions.

For the student section:

What would you expect to pay for a single ticket?

What price would be expensive but you would still attend?

What price would be so expensive that you would not attend?

For the VIP section:

What would you expect to pay for a single ticket?

What price would be expensive but you would still attend?

What price would be so expensive that you would not attend?”

For objective 2, students may be asked to work individually to write down which elements or principles of willingness-to-pay they recognize in the case study. This could be done as a post-it note activity where the students write down their responses on post-it notes and then put them up on the board in the classroom.

For objective 3, the students can work together in small groups to organize the prices for a mock stadium. This could be a kinesthetic learning opportunity where the students use play-dough, Legos, construction paper, etc. to build a mock stadium and color code it by the price for the tickets. They would also do a formal assignment where they decide upon the average price for each section. Finally, this could be an opportunity to discuss differentiated pricing and demand-based pricing. The different sections themselves will be an opportunity to discuss differentiated pricing. Then, the class could hypothesize how the record of the UNLV Rebels (winning vs. losing) and the teams they play might impact demand. For example, the one game that consistently sells out is UNLV vs. University of Hawaii because of the deep cultural ties between Las Vegas and the Hawaiian Islands. Would the students propose to sell those tickets at a higher price?

Online learning

For objective 1, the suggestion for online learning would be to create a discussion board to help reach these objectives. The suggested discussion prompt is below:

“For the case study you read this week, please discuss how different sections of the stadium impacted willingness-to-pay. Specifically, in at least one paragraph, discuss a) how much the consumer was willing to pay for a single ticket varied by section and b) how much the consumers considered to be too expensive varied by section. Then, discuss the results of the question of how much the consumers perception of expensive but would still buy varied by section. Finally, relate this to other hospitality areas. For example, how do you think guests’ perception of their willingness-to-pay for a hotel room would vary by location of that room (i.e. a room with a view of the ocean)?”

For objective 2, this could be an online assignment that matches willingness-to-pay principles to the results of the case study. Please see the below suggested assignment based upon Repetti (2022), chapter 3.

“For this assignment, please relate the concepts presented in the case study to the concepts discussed in class and in the textbook. Specifically, answer the following questions in paragraph format.

- 1) Look at the graphs presented in the case study. These graphs represent the demand curve for each section of the stadium. What is a demand curve? Please interpret the demand curve for each section of the stadium. How does the demand curve change by section?
- 2) Based on the information presented in class, what is the definition of an optimal price? What do you think would be the optimal price for each section of the stadium?
- 3) Finally, do you think there are additional factors not listed in the charts and graphs that could impact willingness-to-pay for these guests? If so, what do you think they might be?

For objective 3, you may create an online environment in which the students can organize ticket prices. If you have the capability, you may create or use a mock stadium that the students can then label with pricing. Alternatively, you may ask the students the following:

“Based on the information presented in exhibits 6 and 7, make pricing recommendations for a single game and a bundle of 5 games without parking. Then, explain your logic and how you varied the prices by section.

Section	Price for one ticket	Price for 5 tickets
Section 101-105		
Section 106-108		
Non-VIP Sections 109-115		
116-118		

Analysis of Teaching Objectives and Theoretical Concepts

The purpose of these exercise is to achieve the outlined teaching objectives. Below are the measurements of success for each objective as well as the theoretical concepts. This metric can be used for assessing your students understanding of the competencies regardless of the exercises you use to measure it.

Objective/Theoretical Concepts	Exceeds	Meets	Falls below
Recognize how different sections in the stadium impacted willingness-to-pay and correlate this to different parts of hospitality.	The student distinguishes the impact of different sections on willingness-to-pay, explain how this can impact customers' spending behavior at the stadium, and then extrapolate how these concepts relate to other parts of hospitality.	The student is able to distinguish the impact of different sections on willingness-to-pay. The student is able to describe this phenomenon and relate to other parts of hospitality.	The student cannot describe the impact of different sections on willingness-to-pay and/or is unable to correlate these concepts to different parts of hospitality.
Recall the principles of willingness-to-pay presented in the course and compare them to the results of the case study.	The student is able to define willingness-to-pay, explain how it is used in the case study, and then describe how understanding willingness-to-pay can benefit hospitality organizations.	The student is able to define willingness-to-pay and describe how it is used in the case study.	The student is unable to define willingness-to-pay and/or unable to understand how it is used in this case study.
Organize the ticket prices for the stadium based on the willingness-to-pay and relate this activity back to differentiated pricing.	The student can organize ticket prices for the stadium based on willingness-to-pay, explain how that might change in the future, relate the activity back to differentiated pricing, and explain how differentiated pricing might change over time based on external factors.	The student is able to organize ticket prices by section, explain how willingness-to-pay impacted this organization, and explain how this is an example of differentiated pricing.	The student is unable to organize ticket prices by section, explain how willingness-to-pay impacted this organization, and/or explain how this is an example of differentiated pricing.
Differentiated Pricing	The student can define differentiated pricing, describe its impact on hospitality businesses, identify how it is used in the case study, and explain how it can be used in different parts of hospitality. The student can also generate differentiated pricing based on the information provided in Exhibits 6-8.	The student is able to define differentiated pricing and describe how it is used in the case study.	The student is unable to define differentiated pricing and/or unable to identify and explain how it is used in the case study.

Additional Suggested Readings and References

- Arslan, H. A., Easley, R. F., Wang, R., & Yilmaz, Ö. (2022). Data-driven sports ticket pricing for multiple sales channels with heterogeneous customers. *Manufacturing & Service Operations Management*, 24(2), 1241-1260.
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- Kemper, C., & Breuer, C. (2016). How efficient is dynamic pricing for sport events? Designing a dynamic pricing model for Bayern Munich. *International Journal of Sport Finance*, 11(1), 4-25.
- Morehead, C. A., Shapiro, S. L., Madden, T. M., Reams, L., & McEvoy, C. D. (2017). Athletic ticket pricing in the collegiate environment: An agenda for research. *Journal of Intercollegiate Sport*, 10(1), 83-102.
- Repetti, T. (Ed.). (2022). *Hospitality revenue management & profit optimization*. RevME.