Creating Value at a Free Sporting Event: More Than Price?

Todd Hall, Jacksonville University Charles Jones, University of Georgia

Abstract

In an environment where intercollegiate athletic directors are increasingly dealing with pressure to increase revenues, identifying and capitalizing on new sources of revenue can provide an unexpected benefit. However, when tradition dictates that spectators enter sport competitions free of charge, administrators must carefully weigh the outcomes of generating additional revenue against alienating fans who have come to expect certain levels of access to sporting events. Multiattribute theory (Ajzen & Fishbein, 1980) states that products and services are often comprised of many features or attributes making them more, or less desirable. In this study, a self-explicated conjoint analysis was employed to ascertain which product attributes were most important for spectators of a free spring football game. Results suggest that spectators of this particular event may be willing spend to money on tickets, provided their seat location and parking preferences are satisfied.

Introduction

With mounting pressure to increase revenue streams for their respective athletic departments, collegiate athletic directors around the country are continuously seeking new and creative ways to engage with fans and generate new sources of revenue for their programs. We have witnessed, in recent years, as athletic departments have responded to this pressure by outsourcing their ticket sales functions to corporations such as IMG College, The Aspire Group, and Nelligan Sports Marketing, who ultimately employ a professional, or outbound sales approach to selling tickets. Possibly another sign of changes to come occurred in the summer of 2013, when the University of Michigan announced that their football program would be implementing a dynamic ticket pricing model (Michigan, 2013), wherein marketplace demand dictates the prices of tickets. This model often causes ticket prices to rise, sometimes dramatically, for more favorable games. This method of ticket pricing has been applied in Major League Baseball and other professional sports for several years now.

However, in contrast to paid events and revenue generating ticket strategies, college athletic departments also commonly allow free access to sport competitions, especially when low consumer demand warrants such an approach. When such a strategy is employed, it may be difficult for an athletic director to ascertain if enough value has been created in order to start charging an entrance fee. Administrators of athletic programs must carefully weigh the outcomes of generating additional revenue against alienating fans, who have come to expect certain levels of access to sporting events. As such, the current study employed a self-explicated conjoint analysis to investigate value creation for fans that attended a free spring football game at a mid-size university in the southeast U.S.

Background & Theoretical Framework

Annual spring football games are unique sporting events. Traditionally, collegiate football programs across the country end their spring schedule with an intrasquad scrimmage. These contests are played between players from the same team and involve no outside opponent. In most cases, the annual spring game is the first opportunity for fans to witness the composition of the team for the upcoming fall season. Graduating seniors are no longer eligible to participate, providing new opportunities for underclassmen (often with limited playing experience) to play in the game. Such exhibitions can be important for intercollegiate athletic departments on many levels. First, on the playing field, coaches have the opportunity to evaluate players in a competitive environment. Second, athletic programs often seek to increase loyalty and identification with fans through engagement in a variety of activities throughout the day. Third, although minimal entrance prices suggest this is not a primary goal, spring games can provide athletic programs with an additional source of revenue.

While major universities employ varying pricing strategies, most seem to be fairly negligible in cost. For example, last spring the University of Missouri charged \$3, Auburn charged \$5, and The Ohio State University charged \$7. Other programs such as the University of Oregon aided local food banks by charging three non-perishable food items for "free" game admission. Meanwhile, recent BCS Champion, Alabama drew more than 78,000 fans without charging a fee. At the school where this study was conducted, tradition also dictated that fans watch the game free of charge. However, in stark contrast to the University of Alabama, whose athletics budget exceeded \$120 million in 2011, of which 4.2% was subsidized, the same year athletics budget for the department in this study was \$11.2 million, with 72.7% being subsidized (Schnaars et al., 2012). Although in the context of the current study spectators gained entrance to the spring football game free of charge, opportunities to realize supplemental revenue existed in the form of concessions, apparel, and season tickets sales.

According to multiattribute theory (Ajzen & Fishbein, 1980) products are often comprised of many features or attributes, which make them more or less desirable to potential consumers. Sports products and services do not differ in this regard from traditional consumer products. Ferreira and Hall (2013) described ticket packages to attend sporting events can contain a variety of attributes including, but not limited to seat location, ticket price, number of games, and rivalry games. Multiattribute theory posits that consumers make choices based on the importance allocated to the various attributes that make up the total product package. For example, a jogger may prefer a low-cut shoe, with significant cushioning, and a durable sole for running on rough surfaces. In contrast, a basketball player may prefer a high-cut shoe for ankle support and a smooth sole designed for playing on varnished wood basketball courts. The difference in preference for these specific different product attributes highlights consumer decisions underlying a choice framework.

As the fields of economics, psychology, and marketing have led the inquiry into the evolution of how individuals make choices, two general paradigms have been developed to provide an explanation underlying consumer decision-making (Alpizar, Carlsson, & Martinsson, 2003; Louviere, Hensher, & Swait, 2000; Louviere & Timmermans, 1990). The first, called revealed preference, requires consumers to make choices in real world settings. Their preference for certain attributes are revealed precisely by the choices they make. The second paradigm, called stated preference or stated choice, occurs in a hypothetical rather than a real setting. In this model, consumers are presented with realistic, yet hypothetical alternatives, and are asked to state what their preferred product alternative would be.

Employing stated choice and preference frameworks has gained traction in sport management literature in recent years. Topics such as the impact of cause-related marketing on choice (Lee & Ferreira, 2011), reaction to prejudicial statements (Cunningham, Ferreira, & Fink, 2009), initial team preference formation (Aiken and Koch, 2009), and choice of sport management programs (Bravo, Won, & Ferreira 2009), among others, have all utilized choice frameworks. Choice frameworks have also previously been employed to investigate ticket-pricing strategies for professional sport teams (Lee & Kang, 2011), as well as in the collegiate athletics environment to explore student ticket policies (Greenwell, Popp, Brownlee, & Jordan, 2007) and ticket package alternatives as a means of increasing revenue (Ferreira & Hall, 2013). A selfexplicated conjoint analysis approach, as explained below, was selected to discover which attributes were of greatest importance to spectators attending a free sport competition. Centered on random utility theory (McFadden, 1974), the self-explicated approach has been shown to produce "suitable predictive ability when compared to traditional conjoint methods" (Hair, Anderson, Tatham, & Black, 1998, p. 424) and can be less cumbersome for respondents to complete when determining the importance of attributes and/or attribute levels (Srinivasan, 1988).

Methodology

Respondents (n = 120) were attendees of an annual spring football game at a university competing at the Football Championship Series level in the southeast U.S. Prior to kick-off, the athletics department organized pre-game tailgating activities, as well as a short football clinic for children up to 12 years old. This provided local youth with the opportunity to interact with team members, while learning a variety of skills related to the game of football. During the time of the pre-game activities and up until half time of the game, 22 trained collectors employed mall intercept methodology to recruit adults to participate in the study. Potential participants were approached in the tailgate areas, as well as throughout the interior of the football stadium. Each pair of data collectors was armed with an IPad and instructed the respondent, where necessary, on how to utilize the technology to complete the online questionnaire. As seen in Table 1, the majority of respondents were male (62%), Caucasian (71%), and had attended the event on multiple occasions (78%). All respondents were entered into a drawing to win tickets to a game against an in-state rival during the following season as an incentive to participate in the study.

Ticket attributes and levels

Ticket attributes are the product features that comprise the entire ticket package. A review of literature, as well as an interview with the school's Ticket Manager and Director of Marketing led to the development of a ticket package containing six different attributes or features. Table 2 displays all six of these attributes (seat location, parking, ticket price, pre-game activity, half time entertainment, and tailgate experience) with their corresponding levels and level utility scores. The levels for seat location reflected the four actual options for spectators in the football stadium. The parking attribute consisted of the actual traditional fee for spring games (\$0), as well as two hypothetical levels (\$10 and \$20) in order to gauge potential price sensitivity to future pricing changes. The ticket price attribute also contained the traditional price of the spring game (\$0), as well as two hypothetical prices (\$10 and \$25). The \$25 price level reflected the cheapest ticket available to regular season home games, while the \$10 level provided an approximate midpoint of reference for the ticket manager. The pre-game experience was assigned the levels of a) no pre-game activities, b) pre-game kids football clinic, and c) pre-game player autograph signing. The athletic department has provided a variety of entertainment

options throughout the history of the spring game. Some have been deemed more successful than others. The Director of Marketing indicated that three options (no entertainment, a school legends flag football game, and a music concert) were plausible activities going forward. Lastly, the spring football game has traditionally started around 12:30pm or 1:00pm. As such, the athletic department, over the past several years, has offered a free tailgate meal at the baseball stadium as a means to incentivize spectators to support the baseball team later in the afternoon. Accordingly, the levels of attribute for the tailgating experience were: a) no tailgating, b) a \$5 half time meal at the football game, and c) a free post-game meal at the baseball stadium.

	Categories	%		Categories	%
Gender	Male	62	Household Income		
	Female	38	Income	< \$20,000	14
				\$20,000 to \$34,999	7
Ethnicity	African American	14		\$35,000 to \$49,999	6
	Asian	2		\$50,000 to \$74,999	13
	Hispanic	3		\$75,000 to \$99,999	17
	Native American	3		\$100,000 and up	25
	Caucasian	71		Decline to respond	19
	Other	3			
	Decline to respond	5	Relation to school	Student	29
				Footall season ticket holder	31
Age	Under 18	0.9		Faculty/staff member	17
	18 to 22	15.2		Other	37
(<i>M</i> = 36.56)	23 to 30	26.8			
(SD = 13.18)	31 to 40	17.9	How many spring	First one	22
	41 to 50	21.4	games attended?	2 to 4	41
	51+	17.9		5 to 8	20
				9+	18
Education	Some high school	1			
	HS grad	12	How did you hear	Friend	20
	Trade/Technical school	3	about the spring	School website	19
	Some college	14	football game?	Local newspaper	9
	2-year college degree	4		TV/Radio advertisement	4
	4-year college degree	46		Athletic department	36
	Grad/professional degree	17		Other	12
	Decline to respond	3			

Table 1: Descriptive Statistics of Sample (n=120)

Experimental design & data analysis

In the self-explicated conjoint analysis experiment, each respondent was exposed to all levels of each attribute – one attribute at a time. The respondent was asked to evaluate each level of attribute for desirability on a 10-point scale. Subsequently, the most desirable level for each attribute was evaluated on a constant sum question (out of 100) in order to assign a relative importance to each of the six ticket attributes (Netzer & Srinivasan, 2011).

Once the attribute importance scores have been recorded, they are used to weight the standardized attribute level scores, ultimately producing a self-explicated utility value for each level of each attribute (Qualtrics, 2012). The utility levels can then be compared to determine the most desirable level. Likewise, the desirability or importance of each attribute can also be determined by comparing respective attribute utility scores. Qualtrics online survey software was utilized to both create the online questionnaire and to perform the data analysis. Specifically, the self-explicated conjoint analysis tools were employed.

Results

The results displayed in Table 2 show that the preferred level for each attribute was as follows: a) seat location – prestige seating (home side with back support), b) parking – free stadium parking, c) ticket price – free entry, d) pre-game activity – player autograph signing barely edging the kids football clinic, e) half time entertainment – music concert, and f) tailgate experience – free post-game meal at the baseball stadium.

Attributes	Level 1	Level 2	Level 3	Level 4
	General Admission	Bleacher Seating	Bleacher Seating	Prestige Seating
Seatlocation	(Grass hill)	(Visitors side,	(Home side,	(Home side, with
Seat Location		no back support)	no back support)	back support)
	0.63	0.92	1.72	1.92*
Darking	Free stadium parking	\$10 stadium parking	\$20 stadium parking	
Parking	1.59*	0.91	0.26	
-	\$0	\$10	\$25	
licket Price	1.43*	0.98	0.46	
	No activities	Kids football clinic	Plaver autograph signing	
Pre-game Activity	0.18	0.84	0.85*	
	No entertainment	Legends flag football	Music concert	
Half-time Entertainment		game		
	0.22	0.97	1.10*	
	No tailgating	\$5 half-time meal	Free post-game meal	
Tailgate Experience			at baseball stadium	
5 - F	0.28	0.75	0.85*	

Table 2: Spring football game attributes and levels

* Preferred level of each attribute

Table 3 contains the utility scores and corresponding rank order of importance for each of the product attributes. These results suggest that seat location was the most important ticket attribute with a utility score of 23.01. Ticket price was the second most important attribute at 19.01, while parking followed with a utility score of 18.40. The remaining ticket attributes pregame activity (player autograph signing), half time entertainment (music concert), and tailgate experience (free meal at the baseball stadium), realized utility scores of 11.41, 14.68, and 13.50 respectively.

Implications

There are several potential managerial implications as a result of this study. First and foremost, the attribute utility rankings show that the spectators of this particular spring football game determined that seat location was the most important attribute of the ticket or product package – even more important than the price. This suggests that these fans may indeed be willing to pay for tickets, provided they realize their desired seating location in the stadium. Not surprisingly, most fans preferred prestige seating on the home side of the field. In combination, these two findings imply that the athletic department could consider introducing a nominal fee for entrance into this traditional sporting event, especially for priority access to the preferred seating areas.

Another important takeaway was the close proximity of attribute utility scores between the second and third ranked attributes - ticket price and parking respectively. This suggests that in addition to preferred seating location, having access to convenient and inexpensive parking locations also adds value to the overall ticket package. It appears that these fans may be willing to pay a fair price for tickets provided the benefits outweigh the cost.

Table 3: Attribute utility fatings and rank order of importance					
Attributes		Mean Score	Rank		
Seat Location		23.01	1		
Parking		18.40	3		
Ticket Price		19.01	2		
Pre-game Activit	у	11.41	6		
Half-time Enterta	ainment	14.68	4		
Tailgate Experier	nce	13.50	5		

Table 2: Attribute utility ratings and rank order of importance

Interestingly, the three more interactive attributes of the product package (pre-game activity, half-time entertainment, and tailgate experience) were ranked as the three attributes with the least importance to the overall fan experience. With regard to the pre-game activities, the alternatives of having a kid's football clinic or a player autograph session were rated as virtually equivalent, with respective utility ratings of 0.84 and 0.85. Perhaps the underlying takeaway for the football program is that the activity does not matter, so long as the children have the opportunity to interact with the players. The half-time entertainment attribute level that garnered the most support was the music concert, while the most preferred tailgating experience was the free meal alternative located across campus near the baseball stadium. The latter bodes well for the athletic department as it has been the alternative being implemented over the past several vears.

The decision to charge an entrance fee to attend an event that has traditionally been free is a difficult choice for any athletic department. In this study, 78% of fans surveyed had attended multiple spring football games at this university with 38% having attended five or more games. The loyalty and repeat patronage of these core fans who have traditionally attended these games for free should be strongly considered when making this decision. Spring intrasguad football games are an annual tradition at most Division I colleges and provide an opportunity for schools to market their programs to students, alumni, faculty and the surrounding community. The research performed here also demonstrates that they can be a source of additional revenue provided the cost does not outweigh the perceived value of the extra benefits.

References

- Aiken, K. D., & Koch, E. C. (2009). A conjoint approach investigating factors in initial team preference formation. *Sport Marketing Quarterly*, *18*(2), 81–91.
- Ajzen, I., & Fishbein, M. (1980). Understanding attitudes and predicting social behavior. Englewood Cliffs, NJ: Prentice-Hall Inc.
- Alpizar, F., Carlsson, F., & Martinsson P. (2003). Using choice experiments for non-market valuation. *Economic Issues, 8*(1), 83–110.
- Bravo, G., Won, D., & Ferreira, M. (2009). Attributes, trade-offs, and choice: A conjoint analysis of sport management programs. *Sport Management Education Journal, 3*(1), 66–91.
- Cunningham, G., Ferreira, M., & Fink, J. (2009). Reactions to prejudicial statements: The influence of statement content and characteristics of the commenter. *Group Dynamics: Theory, Research, and Practice, 13*(1), 59–73.
- Ferreira, M., & Hall, T. (2013). Using a stated choice model to test the viability of new sport event ticket packages. *International Journal of Revenue Management, 7*(2), 105-118.
- Greenwell, T.C., Popp, N., Jordan, J.S., & Brownlee, E. (2007). Customer preference and student tickets: Using conjoint analysis to develop ticket policy. *International Journal of Sport Management, 8*, 280–294.
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate data analysis*. Upper Saddle River, NJ: Prentice Hall.
- Lee, J., & Ferreira, M. (2011). Cause-related marketing: The role of team identification in consumer choice of team licensed products. *Sport Marketing Quarterly, 20*(3), 157–169.
- Lee, Y.H., & Kang, J.H. (2011). Designing ticket price strategies for professional sports teams using conjoint analysis. *International Journal of Sports Marketing & Sponsorship, 12*(2), 124-137.
- Louviere, J.J., Hensher, D.A., & Swait, J.D. (2000). Stated choice methods: Analysis and applications. Cambridge, UK: Cambridge University Press.
- Louviere, J.J., & Timmermans, H. (1990). Stated preference and choice models applied to recreation research: A review. *Leisure Sciences*, *12*(1), 9–32.
- McFadden, D. (1974). Conditional logit analysis of qualitative choice behavior. In Paul, Z. (Ed.), *Frontiers in econometrics*, New York, NY: Academic Press.
- Michigan (2013). *Dynamic pricing*. Retrieved July 9, 2013 from http://www.mgoblue.com/tickets/dynamic-pricing.html
- Netzer, O., & Srinivasan, V. (2011). Adaptive self-explication of multiattribute preferences. Journal of Marketing Research, 48(1), 140-156.
- Qualtrics (2012). Conjoint analysis theory. Retrieved March 15, 2012 from http://www.qualtrics.com/university/researchsuite/research-resources/data-analysisguides/the-use-and-interpretation-of-conjoint-analysis/

Schnaars, C. et al. (2012). NCAA college athletics department finances database. Retrieved July 9, 2013 from http://usatoday30.usatoday.com/sports/college/story/2012-05-14/ncaacollege-athletics-finances-database/54955804/1

Srinivasan, V. (1988). A Conjunctive-compensatory approach to the self-explication of multiattributed preferences*. *Decision Sciences*, *19*(2), 295-305.