# Advertising in Sports

Module 2, Chapter 6

## **Lesson: Advertising in Sports**

## Objectives:

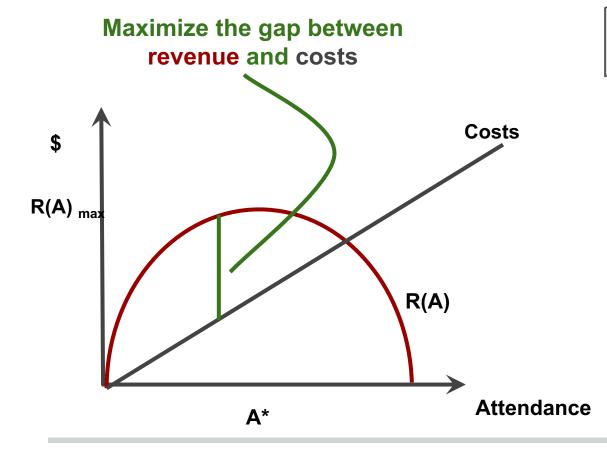
- ☐ Explain the need for advertising in sports
- ☐ Find the optimal profit-max quantity of ads
- ☐ Explain the need for advertising through game theory
- Describe the types of advertisement in sports

# **Advertising in Sports**

AmEx – corporate sponsor of the 2006 NBA draft Sony – sponsor of the Hawaiian Open golf tournament Heinz field, Wrigley field, AT&T field, Key arena The White Sox start their home games at 7:11pm because of 7-Eleven's support Tiger Woods is a Nike man, Bryce Harper endorsed by Under Armour

# Why Advertise?

To be successful, advertising must increase revenues faster than costs.



**Profit Maximizing Rule** 

Admit fans as long as additional revenue is more than additional cost

MR = Additional Revenue MC = Additional Cost

 $MR \ge MC$ 

Revenue is nice, but what about Profit?

#### How many ads should the team purchase if fans respond as such

$$Q = 80A - 4A^2$$

Each Fan Pays \$10

Ads Are Free (Cost = 0)

$$Rev = PxQ$$

Rev = 
$$10 \times (80A - 4A^2)$$

$$Rev = 800A - 40A^2$$

$$MR = 800 - 80A$$

$$Cost = $0$$

$$MC = 0$$

### Profit Maximizing Rule:

$$MR = MC$$

$$800 - 80A = 0$$

$$800 = 80A$$

$$10 = A$$

A Numerical Example

#### How many ads should the team purchase if fans respond as such

$$Q = 80A - 4A^2$$

Each Fan Pays \$10

Ads Are \$100 each (Cost=100\*A)

Rev = PxQ

Rev =  $10 \times (80A - 4A^2)$ 

 $Rev = 800A - 40A^2$ 

MR = 800 - 80A

 $Cost = $100 \times A$ 

MC = 100

Profit Maximizing Rule:

MR = MC

800 - 80A = 100

700 = 80A

8.75 = A

A Numerical Example

# The Seattle Mariners want to take out ads in the newspaper to advertise the July 4th game. They estimate demand at:

$$Q = 22,000 + 800A - 50A^2$$
  
Each Fan Pays \$30

The Seattle Weekly offers the following costs for ads, where A is a full page ad:

$$TC = 500A^2$$

The Seattle Times offers the following costs for ads, where A is a full page ad:

$$TC = 1000A + 200A^2$$

Self Assessment - Quiz

# The Seattle Mariners want to take out ads in the newspaper to advertise the July 4th game. They estimate demand at:

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What is the optimal advertising choice? How much profit is earned?

The Seattle Times offers the following costs for ads, where A is a full page ad:

$$TC = 1000A + 200A^2$$

What is the optimal advertising choice? How much profit is earned?

# **Sports Advertising**

- 2009 top 100 sports advertisers spent \$6.7bln on sports advertising
  - Ads on radio and TV sports programming
  - Signage on venues
  - Print ads in sports publications
- Top product groups cars and trucks, communications and beer

Sports Business Daily: 2011 Spending on Ads During Sporting Events							
Category	Highest Spender	2011 Spending (millions)	Second Highest Spender	2011 Spending (millions)			
Communication	Verizon	\$345.5	AT&T	\$296.9			
Alcohol	Anheuser-Busch	\$299.7	MillerCoors	\$203			
Automobiles	Ford	\$263.5	Chevrolet	\$249.9			
Insurance	Geico	\$163.5	State Fame	\$125.4			

Some companies actually spent MORE on sports advertising during the recession

Game Theory and Advertising

# NBC News: Companies that have wasted the most on Super Bowl advertising (2002 -- 2011)

Company	Total Ad Spending (millions)	Average Ads Per SB	∆ in Market Share
Anheuser-Busch	\$246.2	8.7	-3.7%
PepsiCo	\$209.7	7.2	-2.1%
General Motors	\$135.2	5.5	-9.4%
Yum! Brands	\$67.8	3	-9%
Coca Cola	\$61	2.8	-2.3%

# Top Five Categories: (Nielsen)

Automotive
Beer
Motion Picture
Regular Soft Drinks
Tortilla Chips

Average 30-second Commercial for 2017 Super Bowl LI?

\$5 million (CNBC)

Is it worth it in the sports broadcast market?

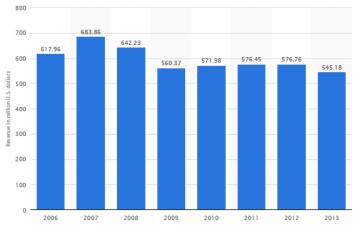
## **Target Audience**

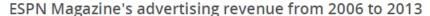
- Each firm has a target audience, which must be reached through advertising
  - gender, ethnicity, household income, age

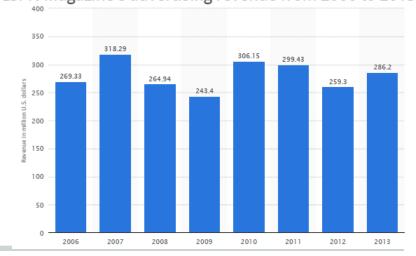
- Sports Publications
- Naming rights
- Sponsorships
- Endorsements

- Sports Publications
  - Sports Illustrated: \$545 mln in revenue (2010)
  - ESPN The Magazine: \$286 mln (2013)

Sports Illustrated's advertising revenue from 2006 to 2013







- Naming rights
  - Heinz Field, Key Arena, Wrigley Field, AT&T Field
  - Multi-year (15-30 yrs) contracts
  - <u>Examples</u> of stadium naming rights

#### NAMING-RIGHT'S DEALS ANNOUNCED SINCE JANUARY 2015

VENUE (CITY) TENANT(S)		TERMS	
Mercedes-Benz Stadium(a) (Atlanta)	Atlanta Falcons; Atlanta United FC(b); Chick-fil-A Peach Bow I	27 years / \$324.0 million	
Chase Center(a) (San Francisco)	Golden State Warriors	20 years / \$300.0 milion-\$400.0 milion	
Videotron Centre (Quebec City)	QMJHL Quebec Remparts	25 years / \$237.5 million(c)	
U.S. Bank Stadium(a) (Minneapolis)	Minnesota Vikings	25 years / \$220.0 million	
Nissan Stadium (Nashville)	Tennessee Titans	NA	
National Car Rental Stadium(d) (St. Louis)	St. Louis Rams	20 years / \$158.0 million	
Golden 1 Center(a) (Sacramento)	Sacramento Kings	20 years / \$120.0 million	
Spirit Communications Park(a) (Columbia, S.C.)	Class A Columbia Fireflies	10 years / \$3.5 million	
Silverstein Eye Centers Arena (Independence, Mo.)	ECHL Missouri Mavericks; MISL Missouri Comets	10 years / \$2.75 million	
MUSC Health Stadium (Charleston, S.C.)	USL Charleston Battery	5 years / \$925,000	
T-Mobile Arena(a) (Las Vegas)	TBD	Just under 15 years(e)	
Vivint Smart Home Arena (Salt Lake City)	Utah Jazz	10 years/NA	
SNHU Arena(f) (Manchester, N.H.)	ECHL Manchester Monarchs	10 years/NA	
Dort Federal Credit Union Event Center (Flint, Mich.)	OHL Flint Firebirds; MASL Waza Flo	NA	
Jimmy Johns Field(a) (Utica, Mich.)	United Shore Professional Baseball League (Independent) Utica Unicorns	NA	
Mapfre Stadium (Columbus)	Columbus Crew	NA	
Target Center(g) (Minneapolis)	Minnesota Timberw olves; Minnesota Lynx	NA NA	

- (b): Expansion team scheduled to begin playing in 2017
  (c): Converted Feb. 16 at a rate of \$1 Canadian = \$0.719657 U.S., per XE.com.
- (d): Announced as an incentive to keep the team in St. Louis. However, the Rams will begin play in Los Angeles this fall.

  (e): According to a SportsBusiness Journal source familiar with the deal

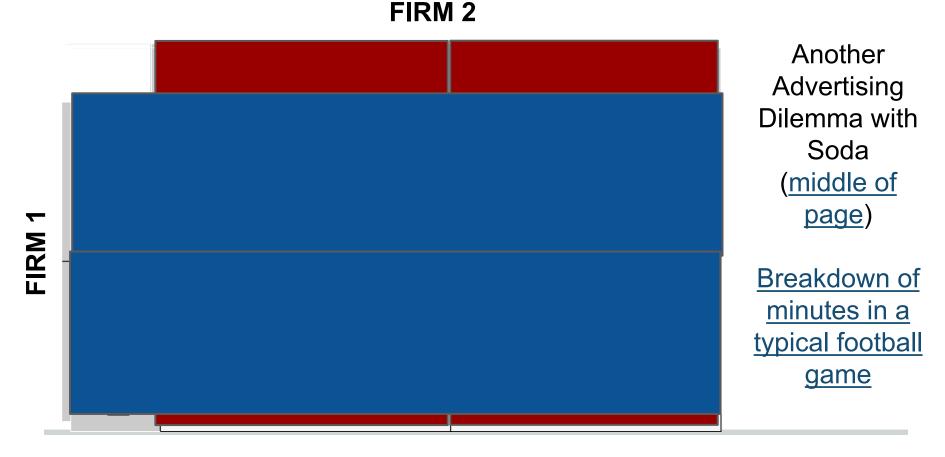
  (f): Begins Sept. 1, after the current 15-year naming-rights contract with Verizon Wireless expires.

- (g): Extension NA: Not available

Source: SportsBusiness Journal research

- Sponsorships
  - Sponsorships of sporting events
  - E.g. 2011: the Discover Orange Bowl, the Allstate Sugar Bowl, the AT&T Cotton Bowl. The Citrus Bowl is now the Capital One Bowl. The Chick-fil-A Peach Bowl, the AutoZone Liberty Bowl
  - Exceptions: the Rose Bowl and Grand Slam Golf tournament have not sold naming rights
  - Exceptions in tennis: the Australian Open, French Open, Wimbledon & the US Open
  - Exceptions in NASCAR: the Daytona 500
  - NFL protects its sponsors: rules forbidding the players from wearing nonsponsor logos. 2007: Brian Urlacher (linebacker for the Chicago Bears) wore a cap with vitamin water logo & paid \$100,000 fine (Gatorade was the official NFL drink).

- Endorsements
  - Industries/firms can endorse players
    - E.g: Nike endorsement of Roger Federer (tennis, \$1 mln per year, then extension with \$13 mln per year), Albert Pujols (baseball, 3-year deal), Matt Fraser (Crossfit)
  - Endorsements can be discontinued if a player disgraces themselves (steroid and hormone use, charges, infidelity, and more).
    - E.g. Nike stopped endorsing Michael Vick, NFL (dog-fighting charges).
    - E.g. Magic Johnson, NBA (dropped by Converse & Pepsi in 1991 after revealing he was HIV positive)
    - E.g. Oscar Pistorius, Olympic & Paralympic games (dropped by Nike & Oakley after he killed his girlfriend)
    - Others: Maria Sharapova, Kobe Bryant, Manny Pacquiao, Barry Bonds, Lance Armstrong, Tiger Woods, Mike Tyson



Game Theory & Advertising



#### TOURNAMENT SCHEDULE





DATES	TOURNAMENTS	NETWORK	DEFENDING CHAMPION	FEDEXCUP POINTS	LINKS
Jan 4 - 7	Hyundai Tournament of Champions Plantation Course at Kapalua, Kapalua, Maui, HI Purse: \$5,700,000	GOLF NBC SIRIUS-XM	Dustin Johnson \$1,140,000	500	Tickets   Hotels   Flights   Cars
Jan 10 - 13	Sony Open in Hawaii Waialae CC, Honolulu, HI Purse: \$5,600,000	GOLF SIRIUS-XM	Russell Henley \$1,008,000	500	Tickets   Hotels   Flights   Cars
Jan 17 - 20	<ul> <li>Humana Challenge in partnership with the Clinton Foundation</li> <li>PGA West (Palmer Course), La Quinta, CA Purse: \$5,600,000</li> </ul>	GOLF SIRIUS-XM	Brian Gay \$1,008,000	500	Tickets Hotels Flights Cars
Jan 24 - 27	► Farmers Insurance Open Torrey Pines (South Course), La Jolla, CA Purse: \$6,100,000	CBS GOLF SIRIUS-XM	Tiger Woods \$1,098,000	500	Tickets Hotels Flights Cars
Jan 31 - Feb 3	Waste Management Phoenix Open TPC Scottsdale, Scottsdale, AZ Purse: \$6,200,000	GOLF NBC	Phil Mickelson \$1,116,000	500	Hotels   Flights   Cars

# Other Event Sponsorships

Sponsorship of NASCAR races

2014-2015 Bowl Schedule

Professional Bull Riders Rodeo Schedule

#### Sponsorships