# 37000: Marketing Strategy

Brad Shapiro

Bradley.Shapiro@chicagobooth.edu

**Exhibit 3:** Salient Pricing Information

| COST INFORMATION (per server) | Electricity (annual cost) | Cost of Application Software Licenses | Labor (# of servers an "administrator" can manage) |
|---|---|---|---|
| Basic server | $250 | $750 | 40 |
| High Performance server | $400 | $750 | 20 |

| Atlantic Computer | Price per Server | Cost per Server | |
|---|---|---|---|
| Tronn (Basic) | $2,000 | $1,538 | |
| Radia (High Performance) | $11,000 | $7,586 | |
| **Ontario Computer** | | | |
| Zink (Basic) | $1,700 | $1,214 | |

*Other customer expense information:*

- Cost of Electricity: Charge for heating and cooling servers, etc.

- Cost of Software Application Licenses: Assume application software is licensed "per server." The average per server application software license is $750. Examples of Application Software are supply chain management software, customer relationship management software, web application software. PESA is a software tool, not application software.

- Cost of Labor: A server administrator's annual salary is $80,000.

# 37000: Marketing Strategy

## More On Pricing

Brad Shapiro

Bradley.Shapiro@chicagobooth.edu

# Ingredients to Good Pricing

- Consumer Preferences
- Marginal Costs
- Competition

# Boston, February 2015

# Example: iPad Release 2010

# 37000: Marketing Strategy

## Pricing II

Brad Shapiro

Bradley.Shapiro@chicagobooth.edu

# Before we get started

- Pricing is one of the most interesting topics in marketing.

- This lecture will cover a ton of ground at a reasonably superficial level.

- This will get you a taste of the topics that you could spend entire careers thinking about.

- If you like these topics, definitely take Prof. Dube's Pricing elective.

# Outline for Today

- **More Behavioral Pricing**
  - Sunk Costs and Hyperbolic Discounting
- **Pricing to different segments**
- **Different prices over time**
  - Skimming, Penetration Pricing
  - Promotions
- **Different consumers, different prices**
  - Direct segmentation
  - Indirect segmentation
    - Consumers self-select into purchasing the "right" product

# Summary From Last Time

- Think about gains and losses in terms of prospect theory
  - Framing, loss aversion, and reference prices
- Price as a signal of quality
  - Especially relevant when consumers haven't yet experienced the product (of course has limits)
- Price cues (sale signs, prices ending in '9') can be important
  - But can also be overused

# Sunk Costs

Imagine you go see a movie which costs $10 for a ticket. When you open your wallet or purse you realize you've lost a $10 bill. Would you still buy a ticket?
- You probably would. Only 12 percent of subjects said they wouldn't.

Now, imagine you go to see the movie and pay $10 for a ticket, but right before you hand it over to get inside you realize you've lost it. Would you go back and buy another ticket?
- In the experiment, 54 percent of people said they would not.

The situation is the exact same. You lose $10 and then must pay $10 to see the movie, but the second scenario feels different.

# Sunk Costs

- The flip side
    - "A man joins a tennis club and pays a $300 yearly membership fee. After two weeks of playing he develops a tennis elbow. He continues to play (in pain) saying 'I don't want to waste the $300!'"

12

# Sunk Costs

THE
GRAND
BUDAPEST
HOTEL

TECHNOLOGY

## Amazon to Raise Fees as Revenue Disappoints

By DAVID STREITFELD    JAN. 30, 2014

SAN FRANCISCO — Amazon investors might have finally heard the news they have been waiting for: The retailer is raising shipping fees.

Amazon has 237 million active customers but as a general rule makes almost no profit. Thursday's announcement that the company was

13
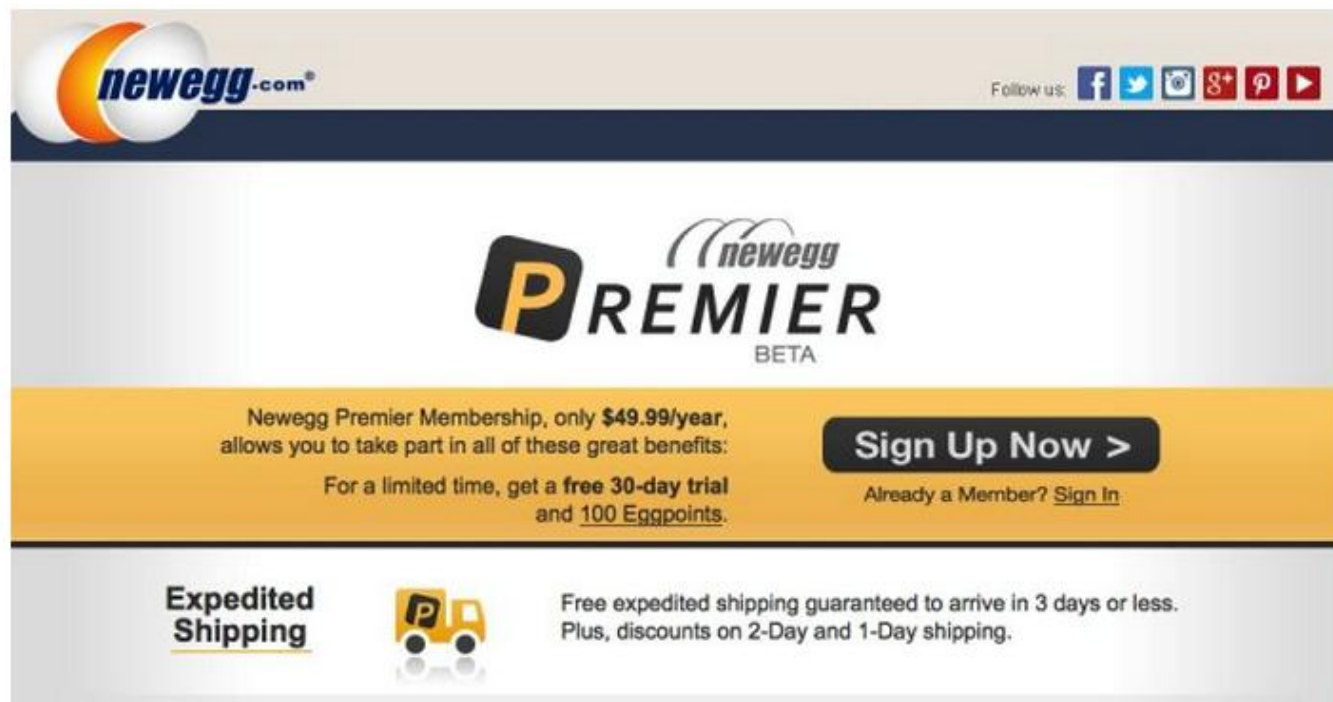
# Sunk Costs



Newegg's answer to Amazon Prime: $50 per year for expedited shipping

Meet "Newegg Premier," which also includes free and no-fee returns and more.

by Cyrus Farivar - Feb 5 2014, 10:25am CST

FINANCE | MEDIA INNOVATION | 86

# Hyperbolic discounting

- Would you prefer $100 today to $101 tomorrow?

- What about $100 30 days from now or $101 31 days from now

- Perhaps a more relevant example:
  - A nap

# Hyperbolic discounting
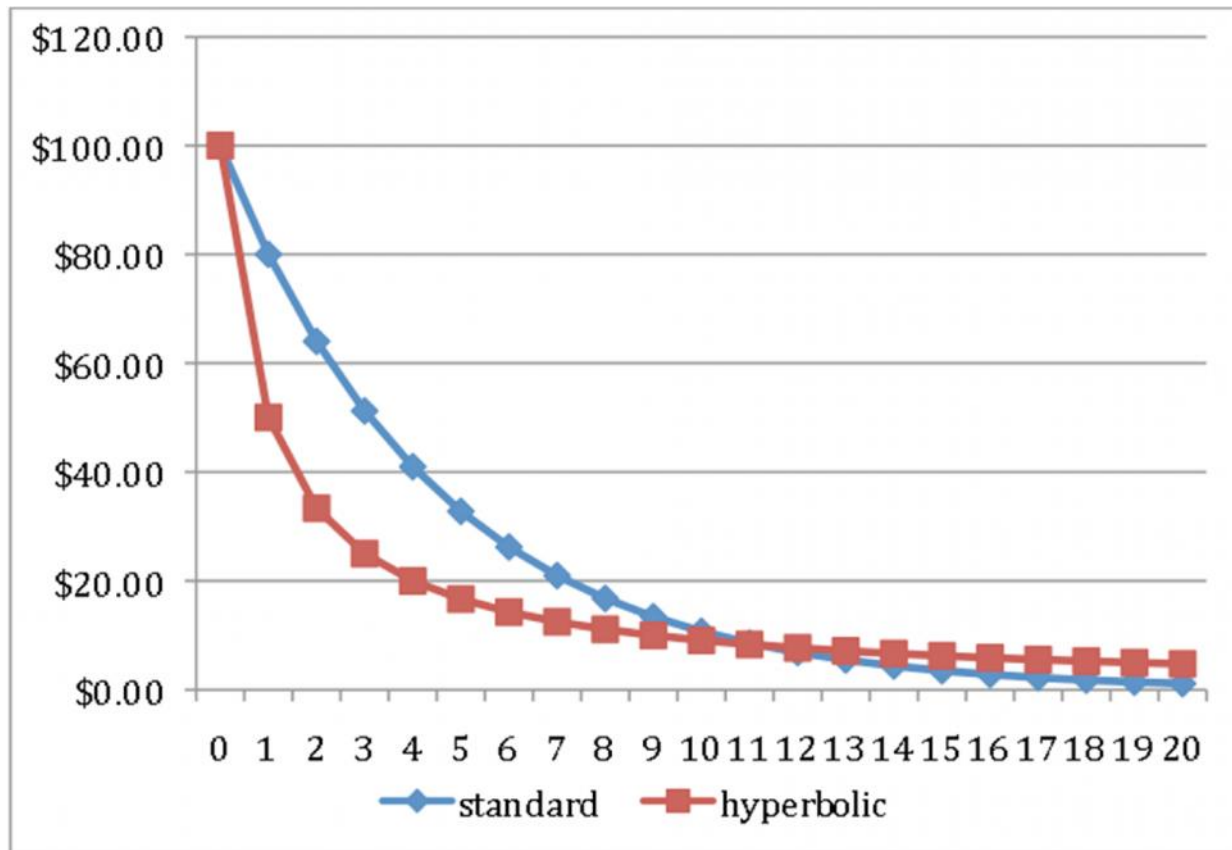


# Beta/Delta preferences

# Hyperbolic Discounting

- Paying not to go to the gym:
  - "In the study, members were offered a $10-per-visit package or a monthly contract worth $70. More chose the monthly contract and only went to the gym four times a month.
  - As a result, they paid 70 percent more per visit than they would have under the plan they rejected. Why? Because people are too optimistic that they can become gym rats, which would make the monthly package "worth it."

# Hyperbolic



Harvard grads turn gym business model on its head; fitness plan members pay more if they don't work out

Amanda Deutsch worked out at Planet Fitness in Cambridge's Porter Square, where she pays based on her ability to stick to her exercise schedule. (Essdras M. Suarez / Globe Staff)
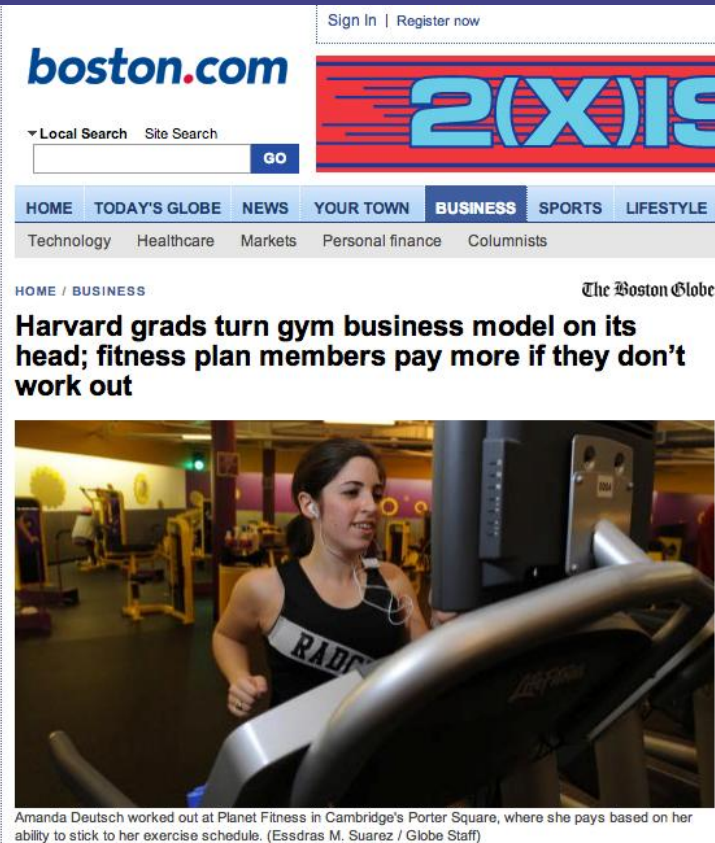
"Gym-Pact offers what Zhang calls motivational fees — customers agree to pay more if they miss their scheduled workouts, literally buying into a financial penalty if they don't stick to their fitness plans."

19

# Behavioral Economics / Pricing

- "A Fine is a Price":
  - "Parents used to arrive late to collect their children, forcing a teacher to stay after closing time. We introduced a monetary fine for late-coming parents. As a result, the number of late-coming parents **increased** significantly. After the fine was removed no reduction occurred."
  - "Prior to the imposition of a fine, about 25% of parents came late. When the fine was introduced, the percentage of latecomers rose, to about 33%. As the fines continued, the percentage of latecomers continued to go up, reaching about 40% by the 16th week"

# 37000: Marketing Strategy

## Pricing to Different Segments

Brad Shapiro

Bradley.Shapiro@chicagobooth.edu

# Takeaways from Last Week

- Pricing
  - Optimal Pricing →constrained optimization
  - Almost always exclude some customers
  - Competitive reaction – iterate to fixed point
    - Take your competitors' current prices as given
    - Figure out the best response function of your competitors

- 3 ingredients to price setting:
  - WTP (elasticity)
  - *Marginal* (not fixed) cost
  - Competition

# Getgoing.com



THE GETAWAY
## Taking Some Mystery Out of Blind Booking
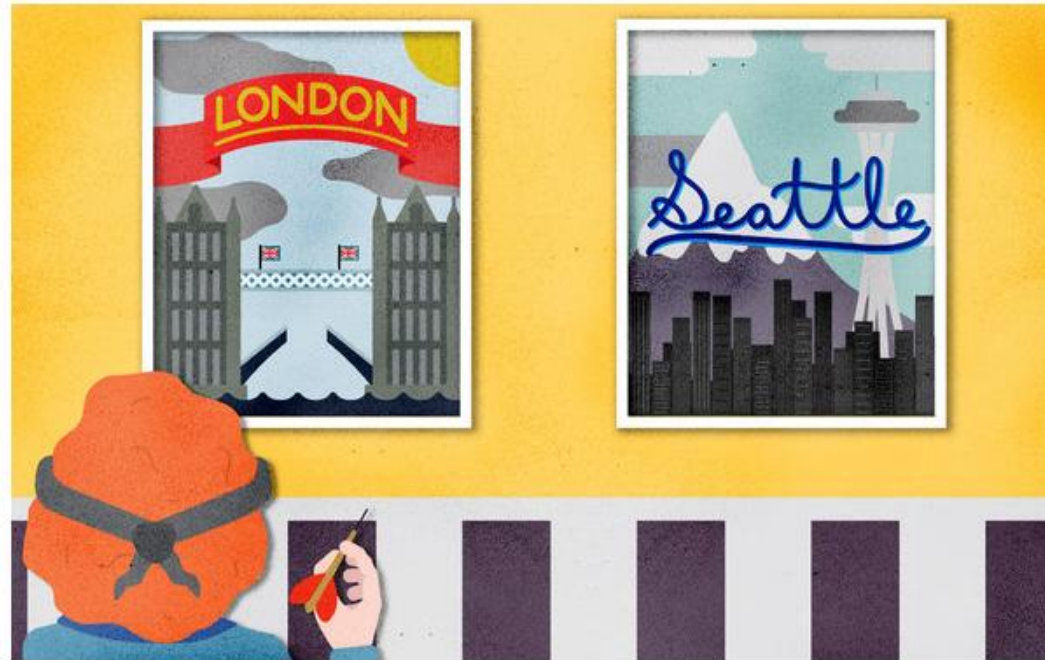
By SUSAN STELLIN
Published: March 28, 2013

Liz Meyer

"you choose two places you would like to visit (say, Miami and Los Angeles), select your travel dates and flights, then enter your credit card details. GetGoing randomly chooses one of the two trips and books your ticket, which you can't change or cancel."

23

# Price Discrimination Outline

- Pricing to different segments
- Different prices over time
  - Skimming
  - Penetration Pricing
  - Promotions
- Different consumers, different prices
  - Direct segmentation
  - Indirect segmentation
    - Consumers self-select into purchasing the "right" product
- When does this go "too" far

# Durable goods: Price Skimming

- With durables, consumers have the choice: Do I buy today or do I buy tomorrow?
  - (for simplicity assume no repurchase)
- The key: People who buy early might be different than those that buy late
  - Higher WTP
  - Inherent value to being an early adopter

# Segmenting Consumers Across Time

- The simple case

- Two consumers:
  - Consumer 1: WTP 9,3
  - Consumer 2: WTP 4,4

- Purchase either today or tomorrow

# Durable Goods Prices Falling
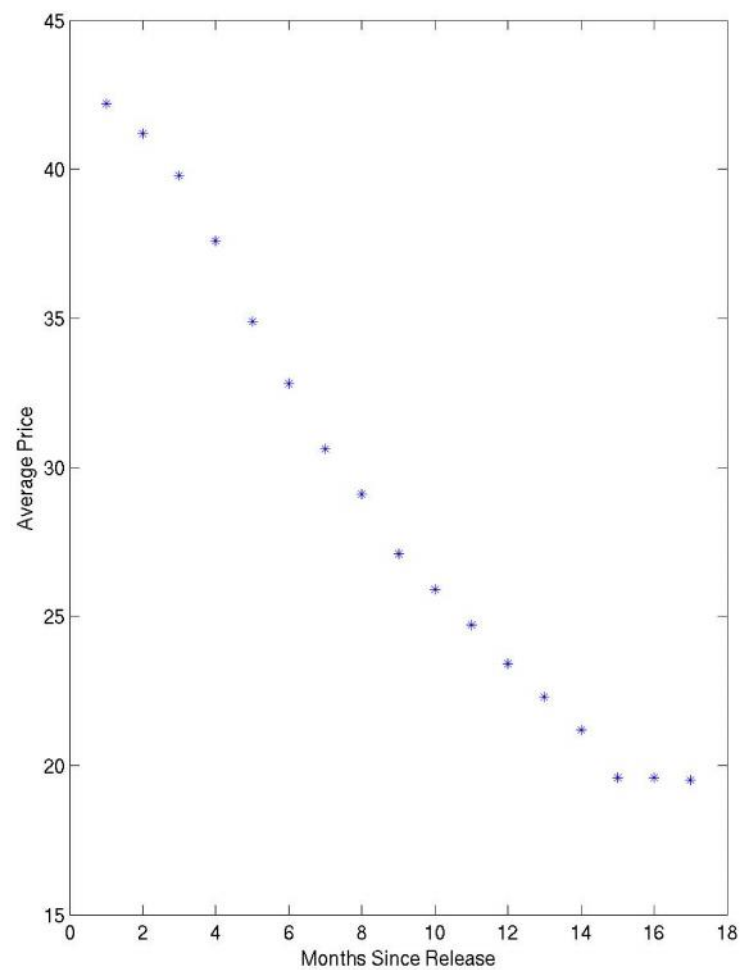


*Source: Nair, Harikesh (2007)*

# But this can break!

- More complicated
- Two consumers:
  - Consumer 1: WTP 9,9
  - Consumer 2: WTP 4,4
- Purchase either today or tomorrow
- What happens if you implement the same pricing scheme?

# Key Difference

- ## Model 1:
  - Consumers who have high WTP also have high discount rates

- ## Model 2:
  - Consumers with high WTP, are more patient

- ## Reality:
  - A combination of the two

- ## Conclusion:
  - 1) Commit and sell to only high guys (or low guys)
  - 2) Moderate your decrease in price path
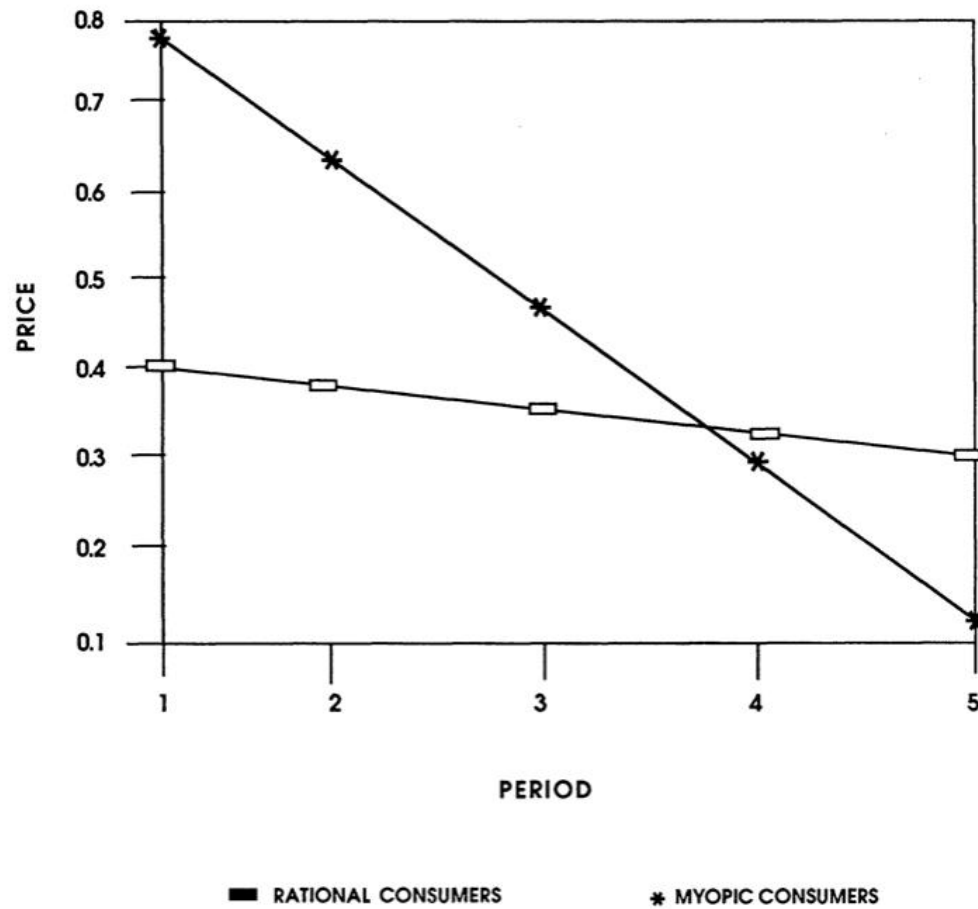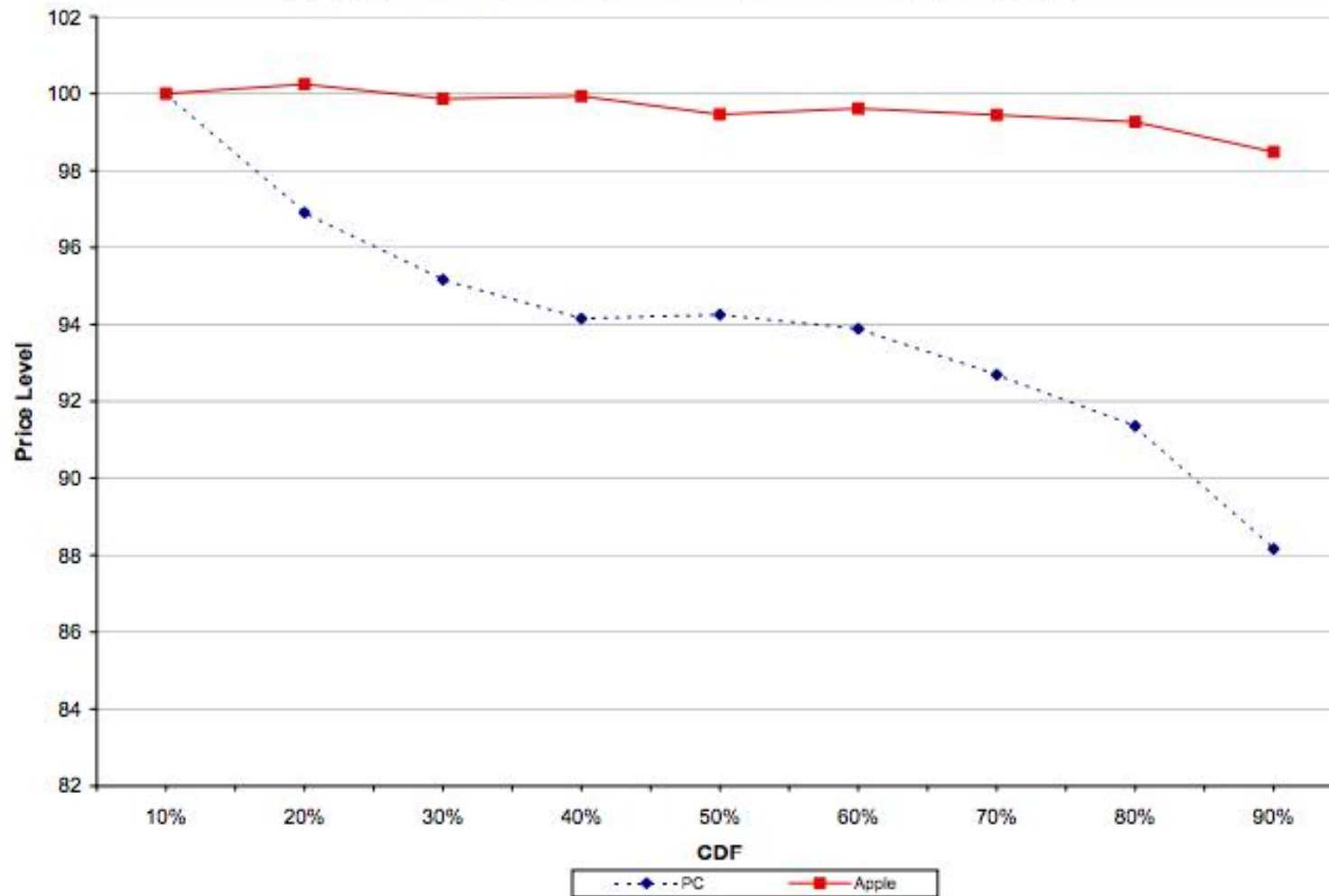
# Are Your Consumers Myopic?



FIGURE 1.  Comparison of Prices.

# The Value of Commitment



Figure 2: Price Declines over Product Cycle

# What about Competition?

- What if a competitor can introduce the same product tomorrow?

- Commitment no longer works
  - Competitors will come in and steal your business

- Prices will be lower in the second period
  - If consumers know this, will lead them to wait

# Does it solve everything?

**iPhone / iPad / iPod**

- iPhone
- iPad
- iPad Mini
- iPod Touch

- iPod Shuffle
- iPod Nano
- iPod Classic

**Portables**

- MacBook Pro
- Retina MacBook Pro
- MacBook Air

**Other**

- Displays
- Apple TV

**Desktop Macs**

- Mac Mini
- iMac
- Mac Pro

**MacBook Air**

| Recommendation | Don't Buy - Updates soon |
| --- | --- |
| Last Release | June 11, 2012 |
| Days Since Update | 335 (Avg = 322) |

**Recent Releases**

| | | |
| --- | --- | --- |
| | ??? | **335 days** |
| | Jun 2012 | 327 days |
| | Jul 2011 | 273 days |
| | Oct 2010 | 499 days |
| | Jun 2009 | 237 days |
| | Oct 2008 | 273 days |

33

# Durable goods lessons

- **Need to think about consumers substituting to tomorrow:**
  - Competition with yourself
- **Would like to segment consumer types**
  - WTP is correlated with a high discount factor
    - Price declines over time (skimming)
  - WTP is not correlated with discount factor
    - 1) Commit to a high (low) price throughout
    - 2) Find another characteristic that is correlated with WTP

34

# Non-durables: Penetration Pricing

- Consumers (might) purchase every period
- Therefore, adoption will be driven by two things:
  - Percentage of people who try your product
  - Percentage of those that decide to repeatedly purchase
- Need to encourage the right people to try early
  - Those that will like it
    - And buy in the future
    - Tell their friends
- Increasing price path might be worthwhile (penetration pricing)
- Free Sampling, couponing, advertising

# Summary

- Non-durables
  - Consumer re-purchase rates will drive long term patterns
- Want to attract best customers for your product
  - Perhaps charge them less at first because they will re-purchase in the future
  - Only if there is this "state-dependence"
- Leads to a strategy of penetration

# Price Promotions

- Now, think about products which are not new.

- When do you want to provide discounts on those products and why?

# Pizza During the Super Bowl



- The amount of pizza that Pizza Hut expects to sell equals 23 million feet of pizza
- Domino's Pizza [expects] an 80 percent increase in sales volume from a typical Sunday.

# Pizza During the Super Bowl



## What About Prices?

# Coke During Hot Weather

# Roses During Valentine's Day?



"An estimated 198 million roses were produced last year just for Valentine's Day.

The average Valentine's Day price for a dozen florist-arranged, long-stemmed roses in the United States is just above $73. At other times of the year, it's just more than $59."

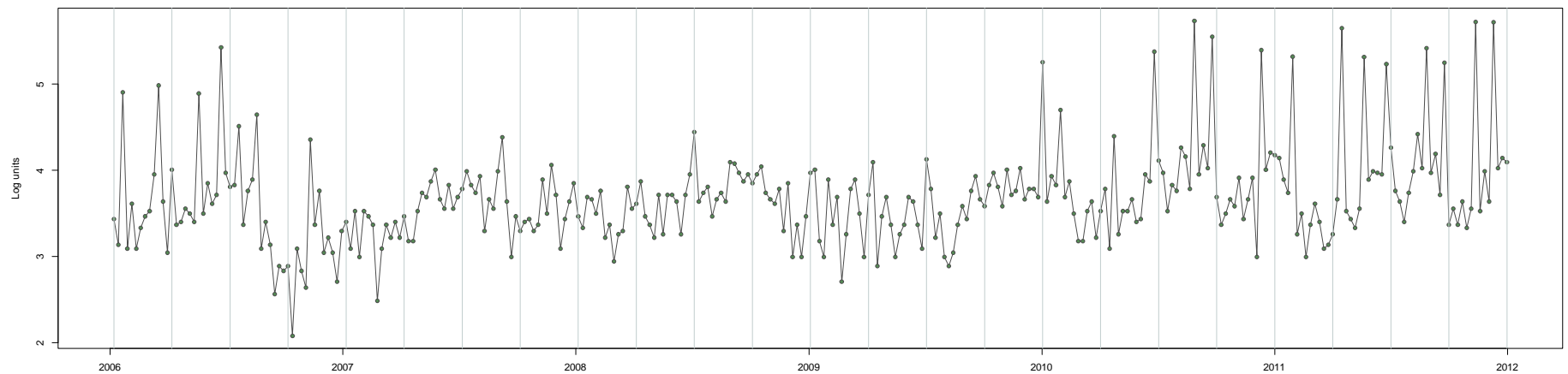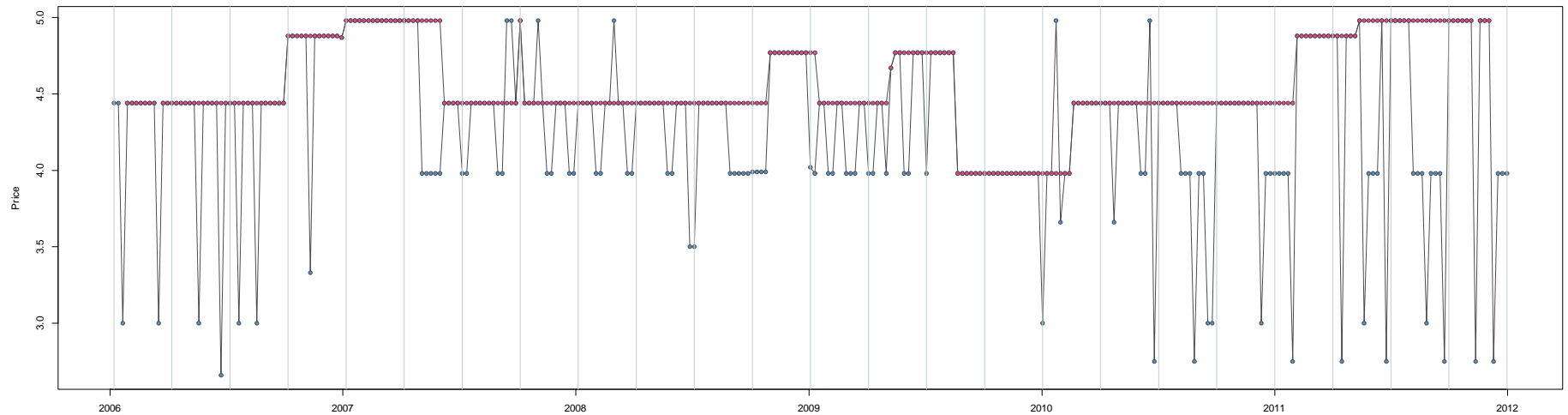# Prices and Demand Shifts

- Pieces to the puzzle:
  - What are the shifts in WTP for "my" consumers
  - How does the population of consumers change?
  - Do these purchase different products during demand shifts?
    - What are the substitutes

# Thinking More Generally

- How can we increase revenue by
  - 1) Recognizing changes in the population of consumers that show up to your door
  - 2) Acting strategically to set the right price to the target consumer group
    - Encourage the target group to show up at the right time
- This is the basis of promotional theory

# Price of Coke?



INGLES MARKETS - Oconee County, SC.   UC store ID: 2401296.   Missing weeks: -0.32 %

44

Supermarkets want *certain* people to know when they put products on sale

# Theory Behind Promotions



Different WTP and different costs of "time-shifting"

# Theory Behind Promotions

- Consumers dislike shifting their times schedules:
  - $U = 12 - s - p$
  - $U = 16 - 12s - p$

- Both prefer to shop on Sunday and pay a cost for shopping on Monday
  - $S = \{0,1\}$

- Options: same price on Monday and Sunday

- Or promote on Monday and have a regular price on Sunday

# Other ways of doing the same thing?

## Coming Soon: Toilet Paper Priced Like Airline Tickets

| Article | Video | Graphics | Stock Quotes | Comments (74) |

Email | Print | Save | f | y | g+ | in | A A

By JULIA ANGWIN and DANA MATTIOLI



It used to be only airfares that changed every minute. But now, prices of everything from clothing to toilet paper are fluctuating dramatically online. Julia Angwin explains on The News Hub.

The fast-moving Internet pricing games used by airlines and hotels are now moving deeper into the most mundane nooks of the consumer economy.

Deploying a new generation of algorithms, retailers are changing the price of products from toilet paper to bicycles on an hour-by-hour and sometimes minute-by-minute basis.

**Most Popular**

Read | Emailed | Video | Commented

1. About 35 Hurt in Prague G

48

# Other ways of doing the same thing?



**namic Pricing**

ers are adjusting prices on
day items several times a
ere is a look at prices
GE microwave on
2 at three
retailers:
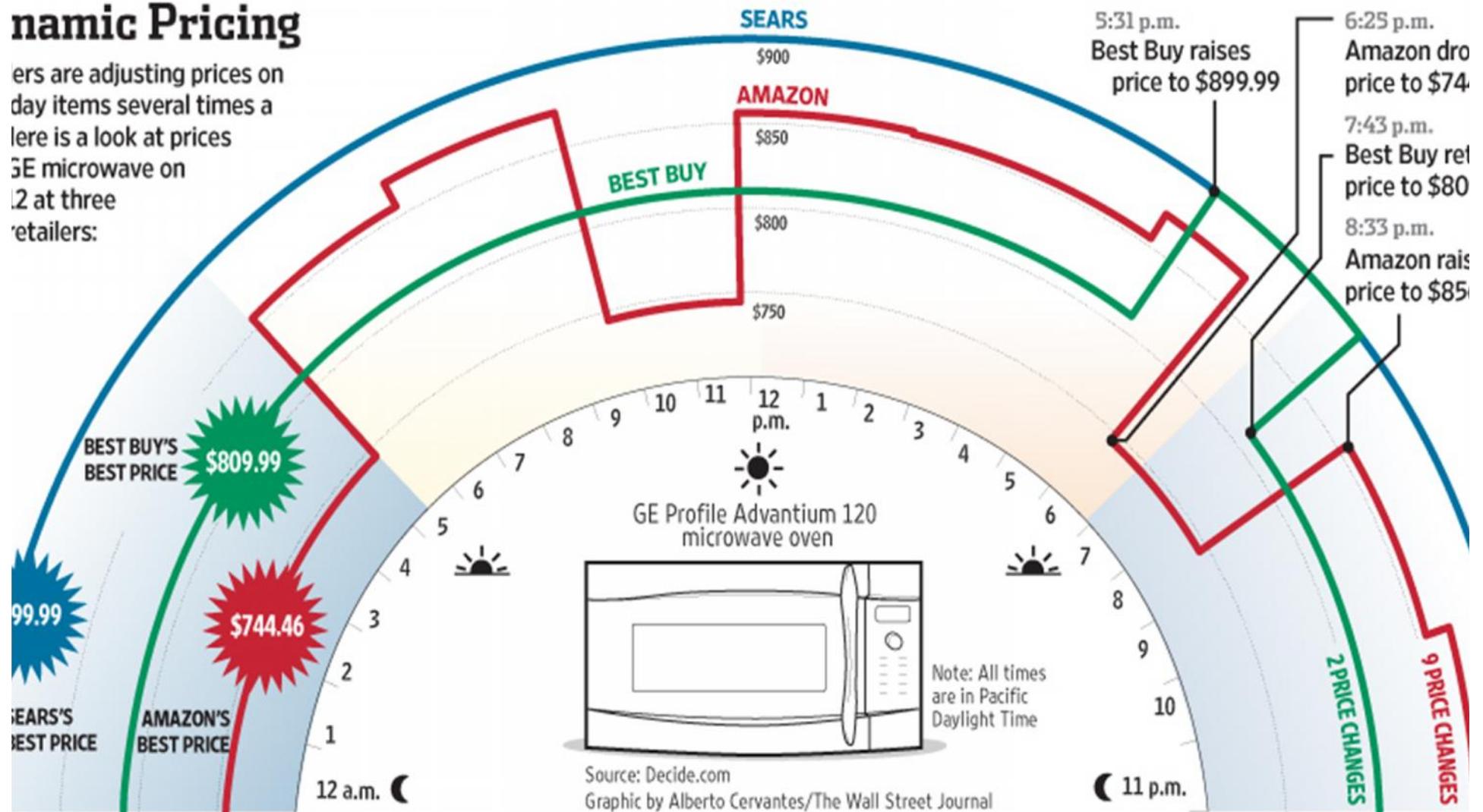
SEARS

$900

AMAZON

$850

BEST BUY

$800

$750

BEST BUY'S
BEST PRICE   $809.99

99.99

$744.46

SEARS'S
BEST PRICE

AMAZON'S
BEST PRICE

5:31 p.m.
Best Buy raises
price to $899.99

6:25 p.m.
Amazon dro
price to $74

7:43 p.m.
Best Buy re
price to $80

8:33 p.m.
Amazon rais
price to $85

2 PRICE CHANGES

9 PRICE CHANGES

GE Profile Advantium 120
microwave oven

Note: All times
are in Pacific
Daylight Time

12 a.m.

11 p.m.

Source: Decide.com
Graphic by Alberto Cervantes/The Wall Street Journal

# The Tradeoff

- ## Leakage
  - Some of the consumers would have purchased anyway (at the higher price) now get a discount.

- ## This is a fundamental tradeoff that will come up over and over again
  - You want to drop price for people that will shift to buying your product, not necessarily those that already are

# Other Reasons for Price Drops?

- Loss Leaders
  - Fixed costs of going to the store
- Create consumer switching costs
  - Once they try a product "tend" to stick with it.
- Clear excess inventory

# Concerns with Price Promotion

- Make customers more price sensitive, less brand-focused

  – High-valuation customers might become low-valuation customers!

- Consumers may change reference points

- Easily copied by competition, leading to price wars

- Consumers simply substitute forward / stockpile

# Takeaways: Price Promotions

- Promotions are a way of separating consumer types
  - Sometimes these separations happen naturally
    - Turkey during Thanksgiving, Pizza during the Super Bowl
  - Strategically shift the consumers that show up to your door
    - Charge different WTP depending on the elasticity of responding consumers

# Different Consumers, Different Prices

- Directly:
  - Charge each person a different price
  - Identify consumers with the "right" characteristics and directly change the price for them
    - Senior citizen discounts
    - Student tickets
    - **Targeted coupons**

- Indirectly:
  - Provide a menu of similar products and consumers self-select into their preferred option
    - Time of day / year (lunch vs. dinner at restaurants)
    - Location (Outlet malls)
    - Purchase Time – Airline tickets

# The Holy Grail

- Know every customer's WTP and charge them that exact amount
- Generally, considered very hard to do in consumer markets
  - Very data intensive
- Examples?

# Direct Price Discrimination

- Amazon:
  - "In September 2000, Amazon.com outraged some customers. One buyer reportedly deleted the cookies on his computer that identified him as a regular Amazon customer. The result? He watched the price of a DVD offered to him for sale drop from $26.24 to $22.74."

# Direct Price Discrimination: 3 Ways

- Know exact WTP, charge that.
  - Very difficult
- Find clear demographic predictors of WTP and charge that way
  - Senior or student discounts
- Use past purchase history to target different WTP.
  - Targeted coupons

# Different Segments

# Example: Pricing Hotel Rooms



**PSYCHOLOGY OF MONEY**

## Orbitz Shows Higher Prices to Mac Users

By Martha C. White | June 26, 2012 | Add a Comment

f Share    f Like {28    ▼ Tweet {12    g +1 {7    in Share    k Send to Kindle

JUSTIN SULLIVAN / GETTY IMAGES
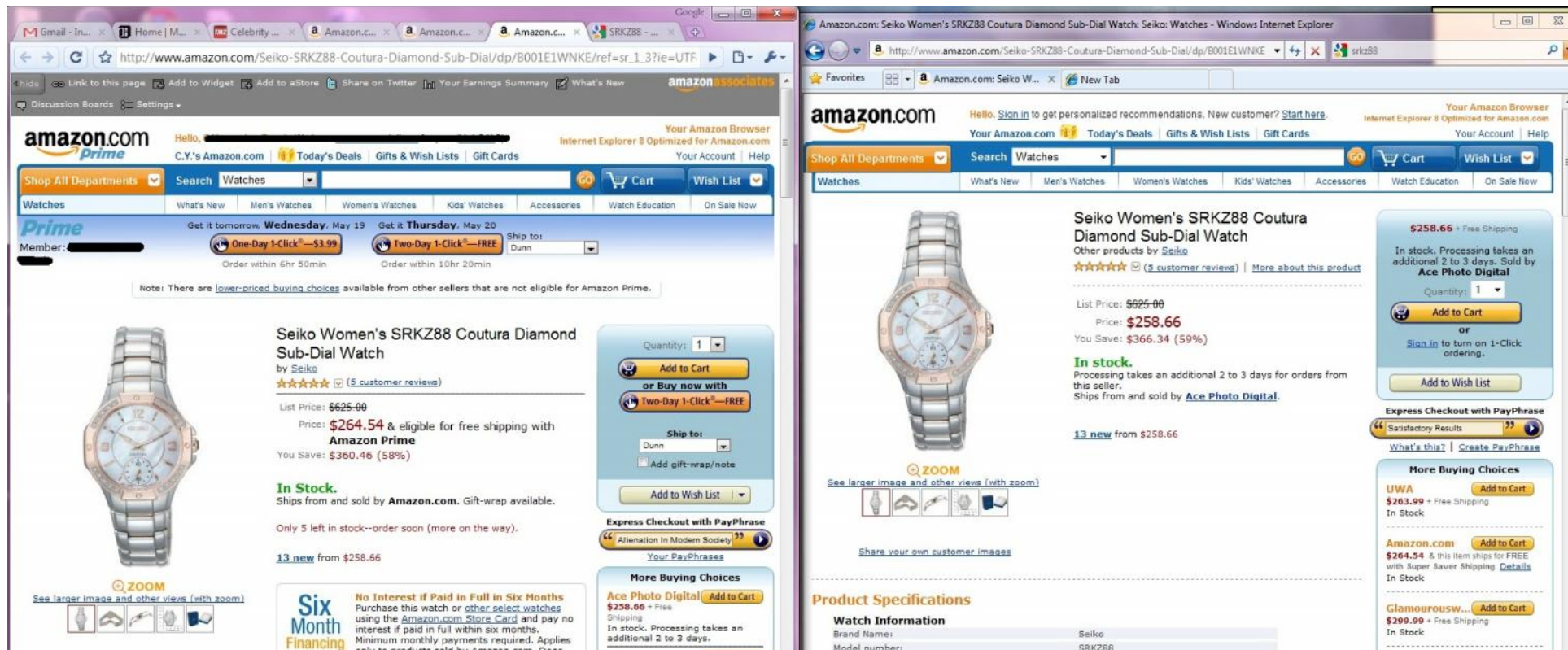
Imagine going for an oil change and finding out that the auto shop charged you a higher price just because you had a luxury car, so they figured you could afford it. You'd probably get ticked off and find another mechanic, right? According to the *Wall Street Journal*, travel website Orbitz.com has begun engaging in an online version of this, showing more expensive hotel offers to people accessing the site from Macintosh computers — a group of customers that spend as much as 30% more on their hotel rooms, according to the company's research.

**RELATED**

On Orbitz, Mac Users Steered to Pricier Hotels *The Wall Street Journal*

Orbitz Shows More Expensive Options to Mac Users *USA Today*

59

# Different Groups?



60

# Searching for a Flight

# Searching for a Flight 2

# Utility Functions

- Mac user, PC user, WTP for hotel rooms:
  - $U = 300 - p$
  - $U = 200 - p$
- Different types of hotel rooms (or not knowing which hotel):
  - $U1 = 300 - p$, $U2 = 150 - p$
  - $U1 = 200 - p$, $U2 = 125 - p$
- Assume MC=0
- Think about priceline here
  - Destroying some of the surplus to make more money

63

# Targeted Coupons

- Begin with your target segment
- Chop it into groups of similar characteristics with different WTP
- Issue coupons to those people

# Types of Consumers

- **Brand Loyalists**
  - Already loyal to you
  - Loyal to your competition
- **Brand Switchers**
- **How do you know who to target?**
  - "Even the information contained in observing one purchase occasion boosts net couponing revenue by 50%"

# Couponing for lifetime value or immediate gains?

- ## What in the data would you want to see?
- ## Immediate value:
  - Consumers who switch back and forth across products (whoever is cheapest)
- ## Longterm value:
  - Consumers who *look like* people that purchase your product but haven't yet purchased it.

# Direct Price Discrimination: Summary

- Best possible scenario:
  - Target individual people based on their WTP
- Not quite as good:
  - Target consumer groups based on observable WTP
  - Often done with targeted coupons
    - Past purchase data is a rich source of information
  - Be clear. Couponing for lifetime value or short-term gains.
    - Different target groups for these different cases.

# Indirect Price Segmentation

- Relies on consumers self-selecting into the product / price pair that they most prefer
- Two types:
  - 1) Find something that is correlated with WTP and segment based on that
  - 2) Offer different prices for similar (but not identical) products such that higher WTP customers are charged more

# Using Correlation in Preferences

# Different Products

- The most common way of doing this is either with quality or quantity
  - Offer a menu of different quality products aimed at different consumer types
  - Offer different package sizes aimed at different consumers

## Compare our product features

| | Federal Free Edition | Deluxe | Premier | Home & Business |
|---|---|---|---|---|
| | Simple tax returns (1040EZ/1040A) | Maximize your tax deductions | Investments and rental property | Small business owner or sole proprietor |
| | **File for $0** | **Start for Free** | **Start for Free** | **Start for Free** |
| | $0 federal $0 state NEW | $54.99 $34.99* State additional | $79.99 $54.99* State additional | $104.99 $79.99* State additional |
| | | MOST POPULAR* | | |
| Easy prep, print and efile | ● | ● | ● | ● |
| Imports your W-2 income | ● | ● | ● | ● |
| Transfers last year's TurboTax return | | ● | ● | ● |
| Covers simple tax situations, including itemized deductions | | ● | ● | ● |
| Covers miscellaneous income and some related expenses (1099-MISC) | | ● | ● | ● |
| Online access to all tax returns on file | | ● | ● | ● |
| Searches 350+ tax deductions and credits (Schedule A) | | ● | ● | ● |
| Extra help to maximize mortgage/property tax deductions (Schedule A) | | ● | ● | ● |
| Includes ItsDeductible™ for donations | | ● | ● | ● |
| Covers sale of stock, bonds and mutual funds (Schedule D) | | | ● | ● |
| Automatic calculation of cost basis (Schedule D) | | | ● | ● |
| Covers rental property income and tax deductions (Schedule E) | | | ● | ● |
| Includes small business income and expense reporting (Schedule C) | | | | ● |

71

# Different Quality Products



Nissan Altima:
$19,910

Infinity G25:
$32,400

# Different Quality Products

- ## Consumer type 1:
  - U = 22,000*v – 1.1*p
- ## Consumer type 2:
  - U = 25,000*v – p
- ## V = {1,1.2}
  - This is the quality of the car
- ## MC = {$10000, $10000}
- ## The problem is satisfying "consumers choosing their most preferred bundle"
  - Incentive compatibility

# Example: Damaged Goods
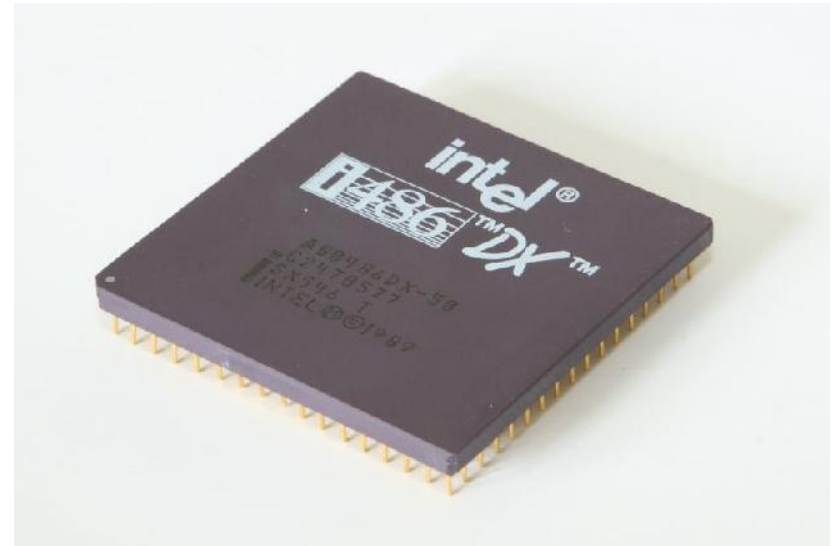
# Bringing it together: MLB Tickets

- How do MLB teams segment consumers by charging different prices?

# Different WTP for better seats
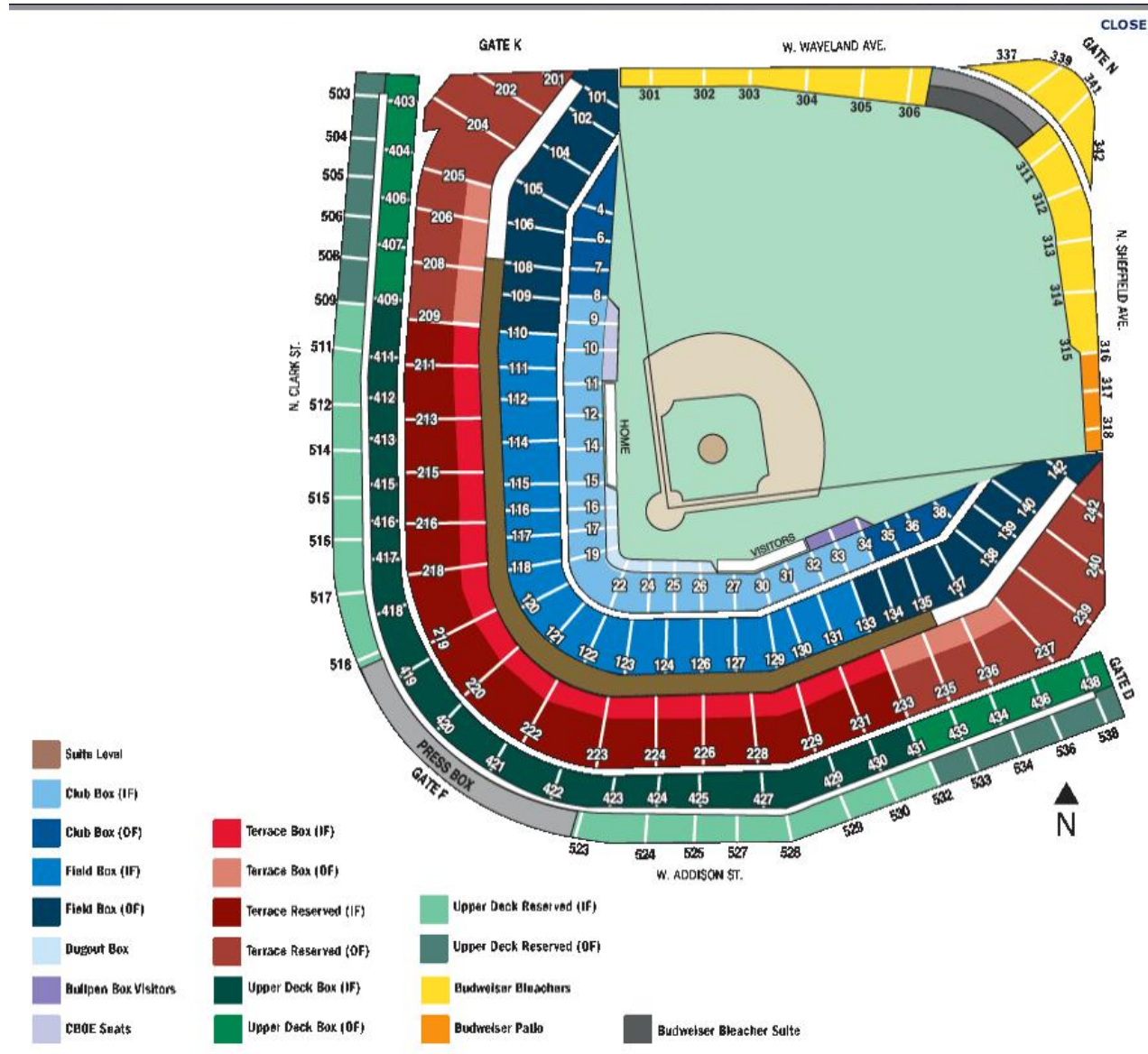
# Different WTP for different games

## 2013 Single Game Ticket Prices - Bowl Seating

| Section Color | Section Name | Marquee | Platinum | Gold | Silver | Bronze |
|---|---|---|---|---|---|---|
| | Club Box (Infield) | $114 | $102 | $96 | $75 | $60 |
| | Club Box (Outfield) | $106 | $91 | $74 | $63 | $45 |
| | Field Box (Infield) | $108 | $91 | $71 | $63 | $45 |
| | Field Box (Outfield) | $82 | $72 | $57 | $49 | $37 |
| | Terrace Box (Infield) | $80 | $65 | $56 | $45 | $29 |
| | Terrace Box (Outfield) | $59 | $51 | $46 | $39 | $23 |
| | Upper Deck Box (Infield) | $77 | $65 | $56 | $46 | $26 |
| | Upper Deck Box (Outfield) | $56 | $48 | $40 | $34 | $17 |
| | Terrace Reserved (Infield) | $50 | $43 | $33 | $26 | $17 |
| | Terrace Reserved (Outfield) | $46 | $34 | $29 | $20 | $14 |
| | Upper Deck Reserved (Infield) | $32 | $28 | $23 | $14 | $10 |
| | Upper Deck Reserved (Outfield) | $29 | $25 | $20 | $13 | $9 |

# Different prices across time

## How dynamic ticket pricing works

By Evan Grant/reporter
egrant@dallasnews.com
2:45 pm on January 8, 2013 | Permalink

[print] [email] [f] 0 [twitter] 3 [g] +1 ⟨ 0 ⟩ [share]                    comments (0)

Here's a look at how dynamic ticket pricing works:

The Rangers are making their largest block of seats – approximately 9,600 – in the upper reserved locations available via dynamic ticket pricing. What this means is that the price for individual tickets for an individual game will fluctuate from the announced price of $19 for regular games and $22 for premier games.

For a mid-week July game against the New York Yankees, already designated a premier game and usually a sellout, prices will likely rise sharply from the $22 base as the game approaches and inventory dwindles. On the other hand, an early season Monday game against a team that doesn't draw well, like Oakland, could drop prices off the $19 face value. The ticket price, however, can't drop below $12, which is the price season ticket holders pay. The intent is to protect the value of being a season-ticket holder.

78

# Tickets: Other Agendas

- Do you think ticket prices are set at their optimal level?
  - "When the Disney star Miley Cyrus (aka Hannah Montana) first toured the US in 2007-2008, tickets with a face value of at most $64 sold out in approximately twelve minutes, and were then immediately posted on secondary-market venues such as eBay and StubHub at prices that in some instances exceeded $2,000"

- Other goals:
  - Full stadiums
  - Concessions / t-shirts / parking
  - Products outside of the stadium

# Going too far?

- Coke and changing price based on hot weather

# Going too far?
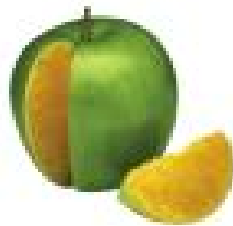
## Victoria's Not-So-Secret Price Discrimination

Sometimes price discrimination can end up being costly not just to consumers, but also to producers. In 1996 Denise Katzman of New York City sued Victoria's Secret for gender discrimination and asked for millions of dollars in damages. In alleging gender discrimination, Katzman didn't object to the catalog's pages of scantily clad women. Rather, she pointed to the promotional coupon on the catalog's back page.

The problem? While Ms. Katzman's catalog offered her $10 off an order of $75, an almost identical catalog for a male friend offered $25 off the same amount. Was her catalog out of date? Nope. The folks at Victoria's Secret were just engaging in a little "naked" price discrimination.

# Going too far

- When do consumers get upset with price discrimination?
  - Targeted prices for individuals
  - Immutable characteristics
    - Victoria's secret sued for charging a lower price to men
  - "Exploitation"
    - Snow shovels in a snow storm.  Bottled water in a hurricane.
  - *Raising* prices for the same exact product
    - People don't seem to mind a discount
    - Prospect theory…

# Some thoughts

- Price based on group characteristics
- Tie benefits to higher-priced "products"
- Justify changes in price with changes in costs
- Use self-selection
  - Indirectly segmenting rarely seems to upset people because they could have selected the other bundle

# Example: Costco

# Example: Instacart

# The Role of Competition

- Competition constrains your ability to charge different prices.
- Can think of this as adding an additional constraint into the consumers optimal choice
- In general, not a well-developed theory
- Interaction with CLV (Borenstein & Rose 1994)

# A More Complicated Pricing Example

MEDIA & MARKETING

## In Music, the Money Is Made Around the Edges

In Pre-Grammy Tradition, Executives Seek Ways to Boost Profits With Freebies, Interactive Videos

Email    Print    Save    |    5 Comments

By HANNAH KARP    CONNECT

Updated Jan. 27, 2014 2:47 a.m. ET

LOS ANGELES—While much of the music industry was busy last week feting Grammy nominees, several dozen artist managers, technologists and record-label executives met for breakfast at a private club on the Sunset Strip to discuss a more urgent matter: how to make more money.

A pre-Grammy tradition that started several years ago known as the Big Bang Forum, the tech-focused discussion highlighted an uncomfortable reality: While Grammy wins and performances still boost record sales and exposure, the glory is increasingly muted as record sales make up a shrinking piece of most artists' income.

# Album Sales
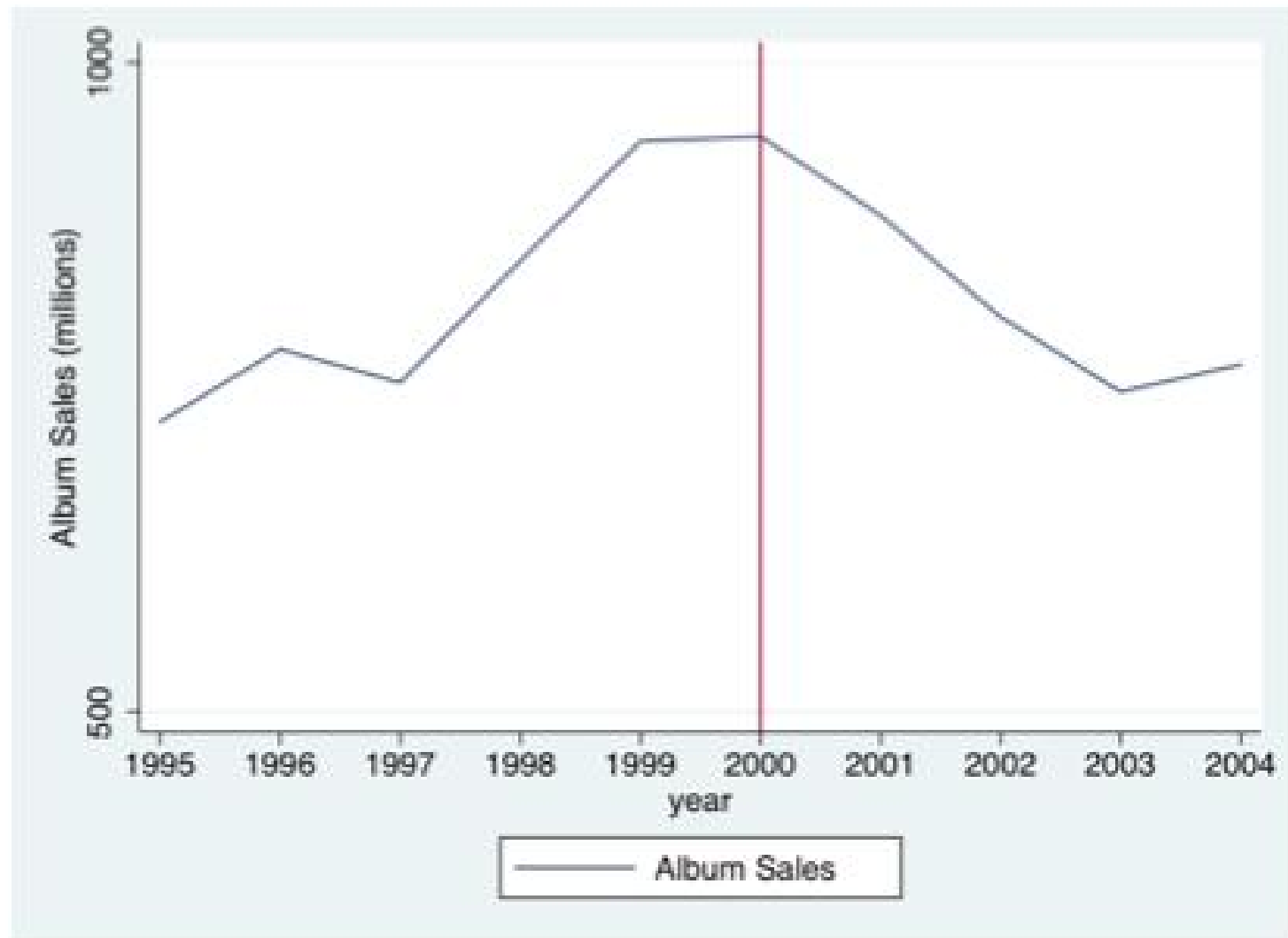
# Album Sales + Concerts



0
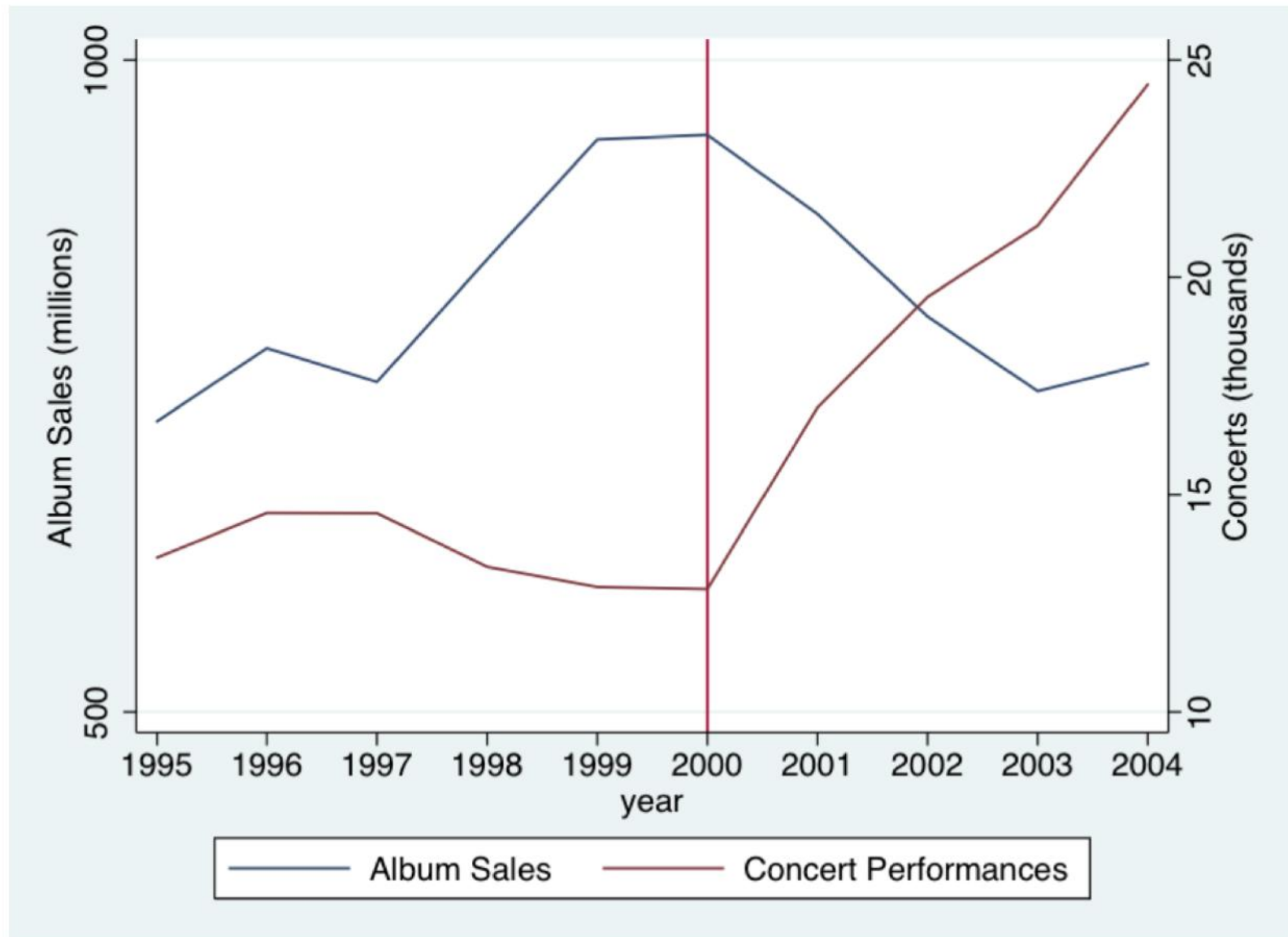
# The Music Industry

**Figure 1: Trends in Total Revenue of the Music Industry, USD Million**
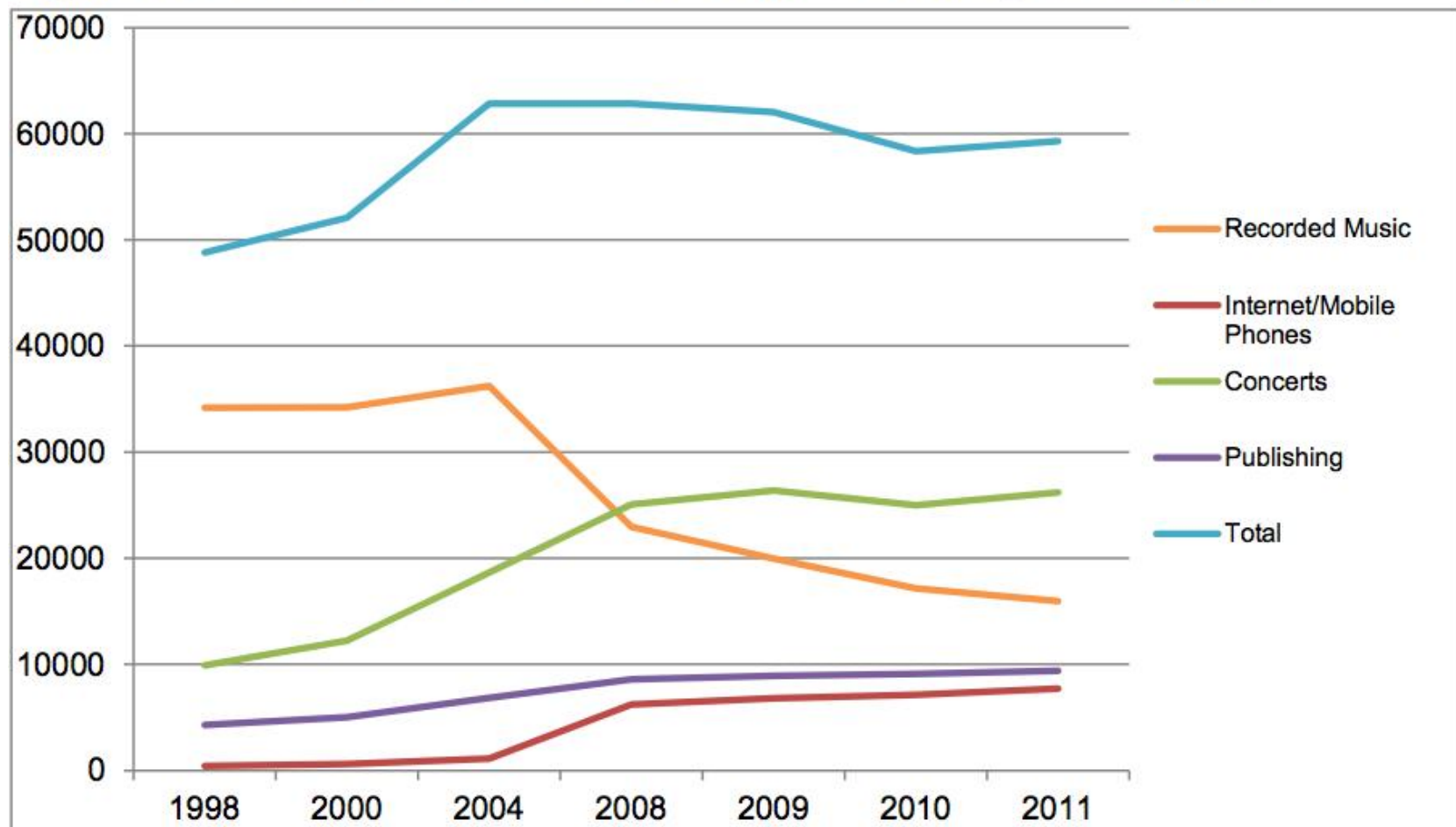
# Price Discrimination in Music Industry

- **"Google's Mr. Quirk said his vision to make money in music involved catering to three different groups:**
  - Only want free music
  - Small WTP for rental (stream)
  - Superfans – almost unlimited WTP for particular music
- **"The trick, Mr. Quirk said, is to market to all three groups at once."**

# Summing Up

- Behavioral Pricing II
- Skimming & Penetration
- Price Promotions
- Direct Price Discrimination
- Indirect Price Discrimination

# Summing Up – Behavioral Pricing II

- ## Sunk Costs
  - Fixed fee + low prices

- ## Hyperbolic Discounting
  - Target the consumer's optimistic view of herself
  - Offer benefits now with the costs later

# Summing Up – New Product Dynamics

- Durable goods:
  - Skim when high WTP is correlated with high discount factor.
  - If not, commit to a high price and only serve high WTP consumers
  - If impossible, just price low.
- Non-durable goods:
  - Penetration pricing if there is state-dependence
  - Want the "right" customers to try

# Summing Up: Promotions

- Promotions are a way of separating consumer types
  - Sometimes these separations happen naturally
    - Turkey during Thanksgiving, Pizza during the Super Bowl
  - Strategically shift the consumers that show up to your door
    - Charge different WTP depending on the elasticity of responding consumers

# The Tradeoff

- Leakage
  - Some of the consumers would have purchased anyway (at the higher price) now get a discount.
- This is a fundamental tradeoff that will come up over and over again
  - You want to drop price for people that will shift to buying your product, not necessarily those that already are nor those who will not repeat

# Summing Up:Direct Price Discrimination

- Senior/Student Discounts
- Past purchase tracking/individualized prices
- Examples:
  - Amazon with past purchase info/prime status
  - Airlines with search engine used

# Summing Up: Indirect PD

- Consumers self-segment themselves
- 1) Find correlation between WTP and a targeting characteristic
- 2) Create multiple similar products that appeal to different consumer groups
  - Correlation between quality and WTP
- Be aware of consumer reaction to segmentation schemes

# Conclusion

- One of the toughest questions in marketing is how to set "fair" prices
  - Price changes over time
  - Different prices to different people
- This is just the tip of the iceberg in terms of one of the most interesting problems in marketing.
- I highly suggest you take "Pricing" from Prof. Dube

# Next Week

- Case discussion: Uber

- Major Case Write-up: Uber

- Lecture: New Products & Product Line Decisions