

# Chapter 14

# Pricing Concepts For Establishing Value (Part II)



#### Today's concepts

- Describe the difference between an everyday low price strategy (EDLP) and a high/low strategy
- Describe the pricing strategies used when introducing a new product
- Describe dynamic pricing
- Describe price discrimination



#### Pricing strategies

#### Everyday Low Pricing (EDLP)

 Promises to consumers a low price without the need to wait for sale price events or comparison shopping



- Consumers: reduces search costs
   → adds value
- Firms: saves effort and expense needed to mark down prices



## Pricing strategies

#### High/low pricing

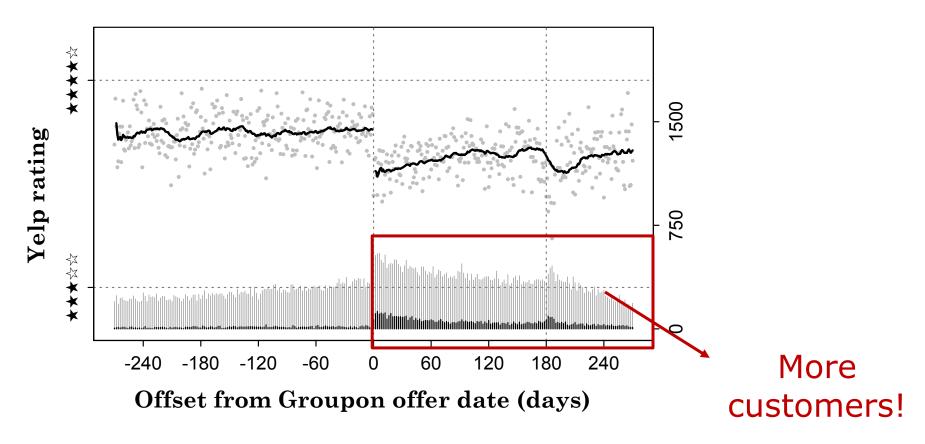
- Relies on promotion of sales
- Attracts two different segments
  - Price insensitive customers (when price is high)
  - Price sensitive customers (when price is low)

#### <u>Amazon case</u>

- Big discounts can attract new users (whom would not have purchased the product otherwise!!)
  - E.g., Groupon case



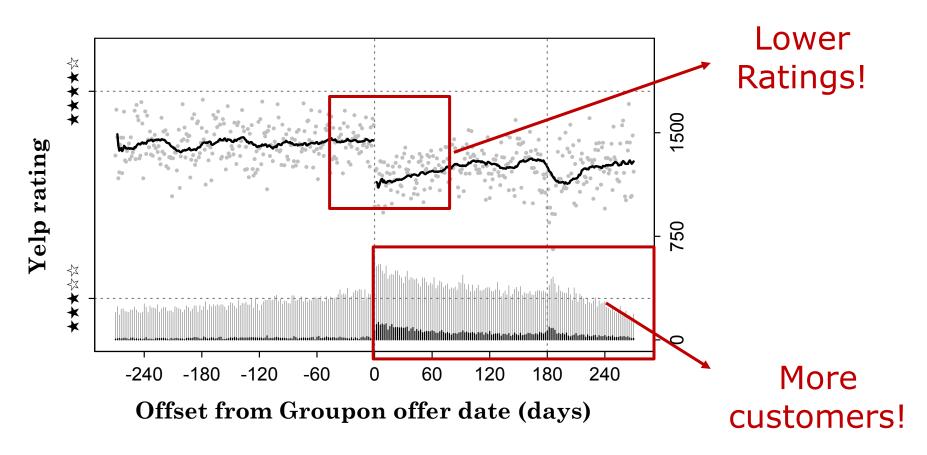
# The Groupon Effect on Yelp Ratings [Byers et al. 2012]



(a) Rating vs. offset, centered on offer date



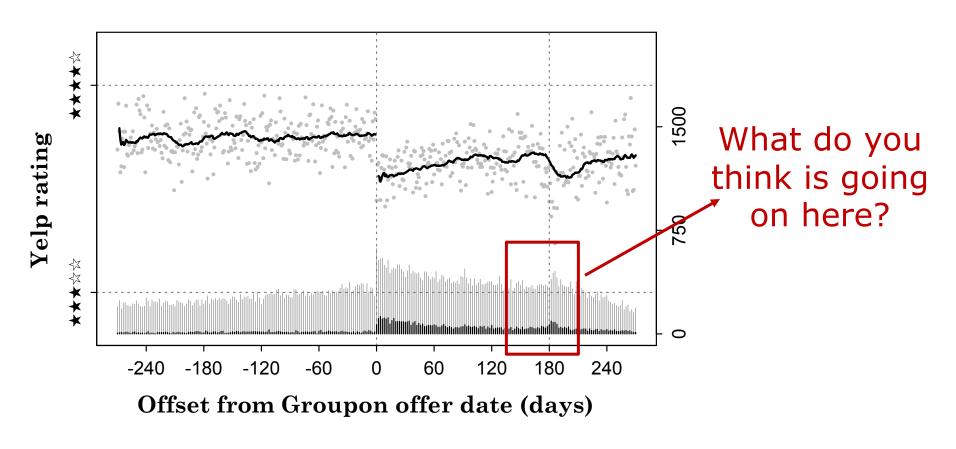
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# The Groupon Effect on Yelp Ratings [Byers eal. 2012]

#### Why do ratings decrease?

- Groupon Businesses are More Likely to be "Bad" Businesses
  - Limited evidence
- Groupon users are often engaging in experimentation
- Groupon reviews are less likely to be artificially inflated (fake)



## New Product Pricing Strategies

#### Two strategies:

- 1. Penetration pricing
- 2. Price skimming



#### Penetration pricing

Set initial price low to build sales, market share, profits

 Good if cost of production decreases with quantity produced (economy of scale)



#### Penetration pricing

#### Pros

- Creates customer base quickly
- Builds market share
- Quick profits
- Discourages competitors from entering the market

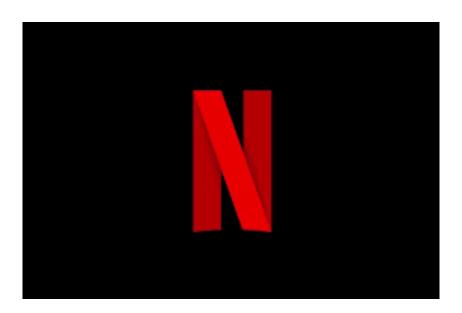
#### Cons

- Sacrifices higher profits (low margins)
- Firm has to keep up with high demand
- Signaling problem: Low price → low quality
- May not create loyal customer base



## Penetration pricing example

• Cable, Internet companies, streaming services





## Price Skimming

- At first high prices
  - Target consumers willing to pay premium to have innovation first
- When market saturates
  - Lower (skim) price
    - Target most price-sensitive segment
- Popular with technology products



#### Price Skimming

#### Pros

- Increased Quality Perception
- Benefits from Early Adopters
  - Brand ambassadors
- Fast costs recovery

#### Cons

- Cannot last long
  - Competitors soon launch rival products
- Consumer Dissatisfaction
  - Negative feedback from early adopters as the firm lowers its prices



#### Price Skimming Example

#### Apple

- New IPhone enters the market at a very high price
  - Reduced when or just before new version hit the markets



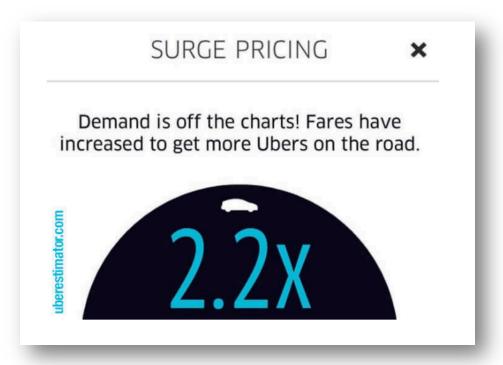




How does Uber set prices?

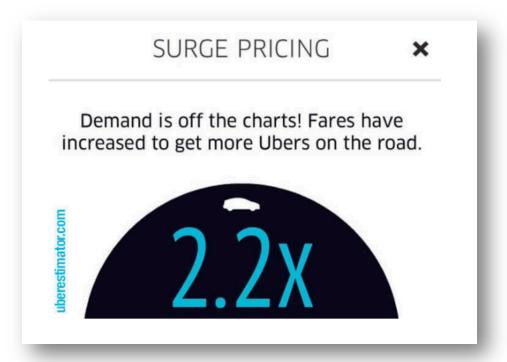


How does Uber set prices?





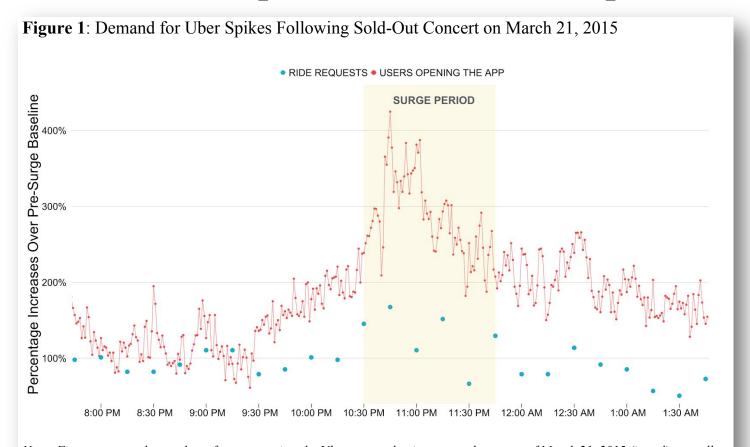
How does Uber set prices?



Rates automatically increase, when the demand for drivers is higher than drivers around you.



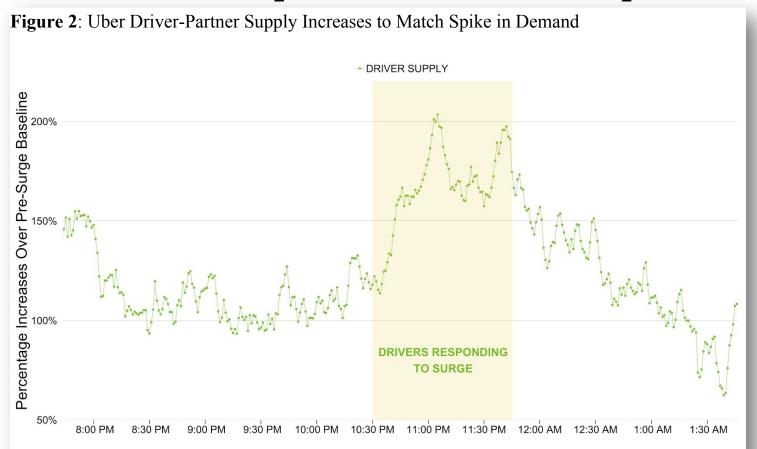
#### Surge price in action [Nosko et al. 2015]



Note: Figure reports the number of users opening the Uber app each minute over the course of March 21, 2015 (in red), as well as the sum of total requests for Uber rides in 15-minute intervals over the same time period (blue circles). Data is for a restricted geospatial bounding box containing Madison Square Garden in New York City, roughly 5 avenues long and 15 streets wide, for uberX vehicles only. Pure volume counts have been normalized to a pre-surge baseline, defined as the average of values between 9:00 and 9:30 PM that evening, before surge turned on. "Surge period" (yellow box) is the time over which the surge multiplier increased beyond 1.0x.



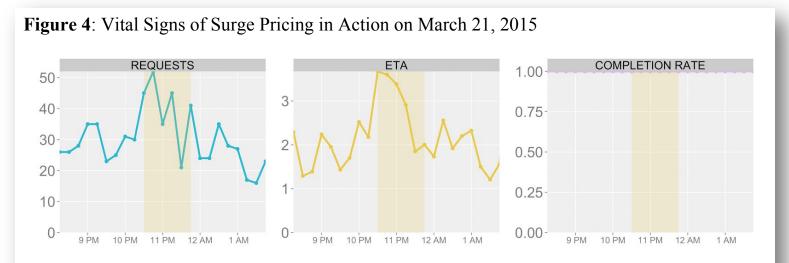
#### Surge price in action [Nosko et al. 2015]



Note: Figure reports the number of "active" uberX driver-partners within the same geospatial box (noted above) each minute over the course of March 21, 2015 (in green). In this case, "active" means they were either open and ready to accept a trip, en route to pick up a passenger, or on trip with a passenger. Pure volume counts have been normalized to a pre-surge baseline, defined as the average of values between 9:00 and 9:30 PM that evening, before surge turned on. The "surge period" (yellow box) is the time over which the surge multiplier increased beyond 1.0x.



#### • Surge price in action [Nosko et al. 2015]



Note: All data above is for uberX vehicles from within the geospatial bounding box mentioned earlier, aggregated into 15 minute intervals over the course of the evening of March 21, 2015. "Requests" is the count of Uber trips requested during the 15 minute interval. "ETA" is the average wait time for a driver-partner to arrive, in minutes, over the 15 minute interval. "Completion rate" is the percentage of requests that are fulfilled (calculated as the number of completed trips within the 15 minute interval, divided by the sum of completed trips and unfulfilled trips). The yellow box indicates the same "surge period" highlighted in Figures 1-3.



 What is the goal (or goals) Uber is trying to achieve with the surge price algorithm?

- 1. Match demand with supply
- 2. Reducing waiting time





- We have seen:
  - Pricing strategies
    - EDLP
    - High/Low pricing
  - New products pricing strategies
    - Market penetration
    - Skimming
  - Dynamic pricing (Uber)



#### Ethics of Pricing: Predatory Pricing

When a firm sets a very low price for one or more of its products with the intent to drive its competition out of business, it is using **predatory pricing** 

 Illegal under both the Sherman Antitrust Act and the Federal Trade Commission Act



#### Ethics of Pricing: price discrimination

- Identical goods or services are sold at different prices by the same provider in different markets
- It requires
  - Market segmentation, e.g.,
    - Student vs non-students
  - No arbitrage
    - Lower-priced users cannot resell to high-priced users!



#### Example fro NYT

#### To discriminate you need to separate







#### Ethics of Pricing: price discrimination

- 1. Personalized pricing (or first-degree price discrimination)
- 2. Product versioning (or second-degree price discrimination)
- 3. Group pricing (or third-degree price discrimination)



## First-Degree Price Discrimination

- Information: The firm is able to identify each consumer type
- Arbitrage: Not possible
- Prices: Will be different to each consumer and each unit



# First-Degree Price Discrimination



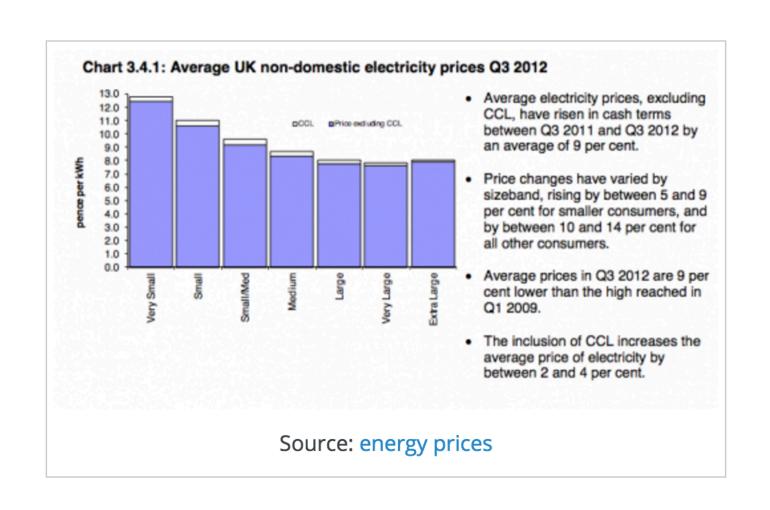


## Second-Degree Price Discrimination

- Information: The firm cannot differentiate consumers ex-ante, but it must know the aggregate characteristics of the market
  - Can still segment!
- Arbitrage: Not possible
- Prices: Will change according to the quantity (or quality) the consumer buys
  - Electricity providers
  - Airlines (first class, economy, etc.)



#### Second-Degree Price Discrimination





#### Third-Degree Price Discrimination

- Most common
- Information: can distinguish consumer groups through a signal (location, age, gender, etc.)
- Arbitrage: Not possible
- Prices: Will change according according to consumer groups (student, senior)



# Third-Degree Price Discrimination





#### Price Discrimination in e-commerce

- Some internet retailers use personal information that users leave (involuntarily) online to price discriminate
  - Type of browser used
  - Location
  - Age, gender, etc.
- In the <u>news</u>





- Price discrimination
  - First-degree: "personalization"
  - Second-degree: quantity/version
  - Third-degree: groups
- Internet and big data are facilitating first degree price discrimination