

Pricing Analytics

Session 4

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Session Overview

- Review of Last Class
- Temporal Pricing Strategies
 - Skimming
 - Penetration Pricing
- EDLP vs High-Low Pricing
- Short-term Price Discounts
 - Trade Deals
 - Consumer Promotions
 - Coupons

Temporal Pricing Strategies

Temporal Pricing Strategies

- Changing prices strategically over the long run
- Skimming
 - Price-discrimination strategy?
 - Hard-cover vs paperback
 - Consumer expectations?
 - Effective when high value customers are also proportionally less patient
- Penetration Pricing
 - Economies of scale
 - Demand externalities (Network effects)

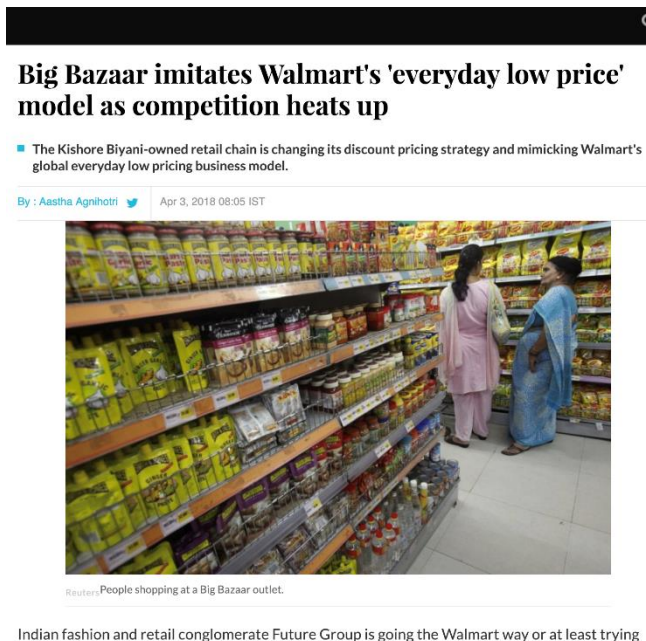
EDLP vs High-low Pricing

Changing Pricing Environment

- In 1970s, a typical company spent no more than 20% of its budget on trade and consumer promotions
- This number went up to 70% in 1990s
- What changed?
 - Short Term Focus
 - Sales force compensation schemes
 - Stock market and competitive pressures
 - Brand management system
 - Data Availability
 - Quarterly vs Weekly

One Solution!

- Stop using Trade/Consumer Promotions
- Move to EDLP!
 - Walmart
 - Sears
 - JC-Penney?
 - Big Bazaar?



Retail Pricing Field-Experiment

- 86 grocery stores belonging to a chain and 26 product categories constituting 1/3 of total store volume
- Design:
 - 29 stores maintained existing pattern
 - 29 adopted EDLP (lowered price by 9%)
 - 28 stores adopted Hi-Lo pricing (increased price by 9%)

Results

- EDLP Stores:
 - Unit sales increased by 3%
 - Profits decreased by 18%
- Hi-Lo Stores
 - Unit sales decreased by 2%
 - profits increased by 17%
- What should we conclude?

Short-term Price Discounts

Effects of Short-term Price Discounts

- Elasticity of short-term price changes is an order of magnitude higher
- Price Elasticity Decomposition:
 - 84% from brand-switching
 - 14% from purchase acceleration
 - 2% from quantity purchased
- Asymmetric Effect (based on brand strength)

Other Consequences/Effects

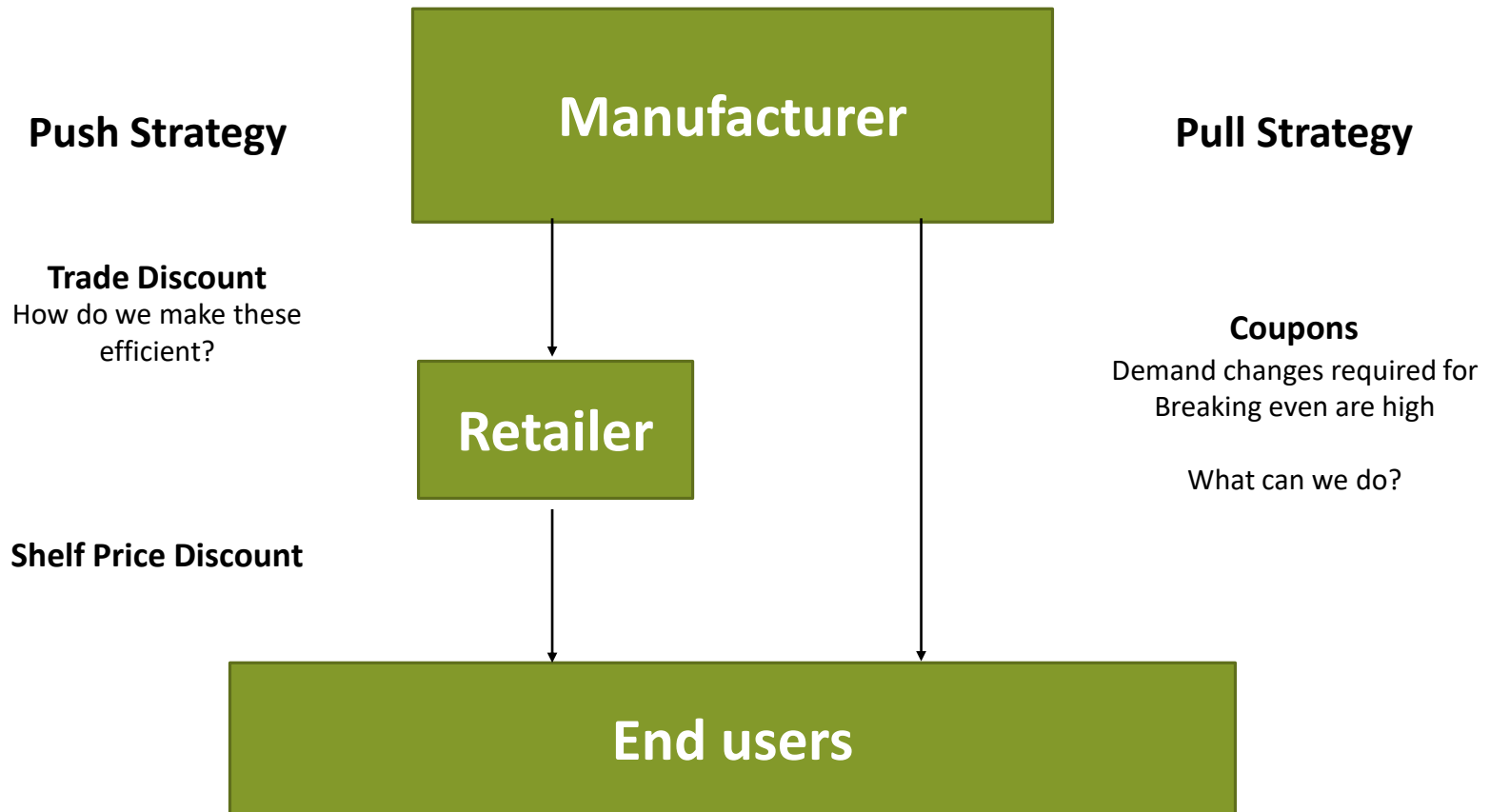
- Generate trial
- Encourage consumers to carry inventory
 - Might lead to increase in consumption!
- Small effect on store switching
- Higher sales of complementary products

Negative Effects?

- Expectations of Future Promotions
- Lowering of Reference Price
- Increase in price sensitivity
- Erosion of Brand Loyalty
- Post-promotional dip in sales

Implementing Short-term Price Discounts

Implementing Short Term Discounts



Trade Discounts

- Short-term discounts offered to retailers
- Advantages:
 - Provides incentive to push our product over competitors
 - Gets attention of our own sales force
- Disadvantages:
 - Not everything is passed through to the consumer!
 - Forward buying by retailers
 - Hurts our production plans
 - Retailers expect discounts in the future
 - Becomes a cost of doing business

Determinants of Pass Through

- Shape of the demand function
- Strength of brand
- Frequency of promotions

Managing Trade Discounts

- How can you avoid forward buying?
 - Scan-back allowance
- Quantity discounts
- Create consumer pressure for pass-through!

Direct to Consumer Discounts

Effect of Promotions (IRI Study)

- Interaction between price promotion and advertising

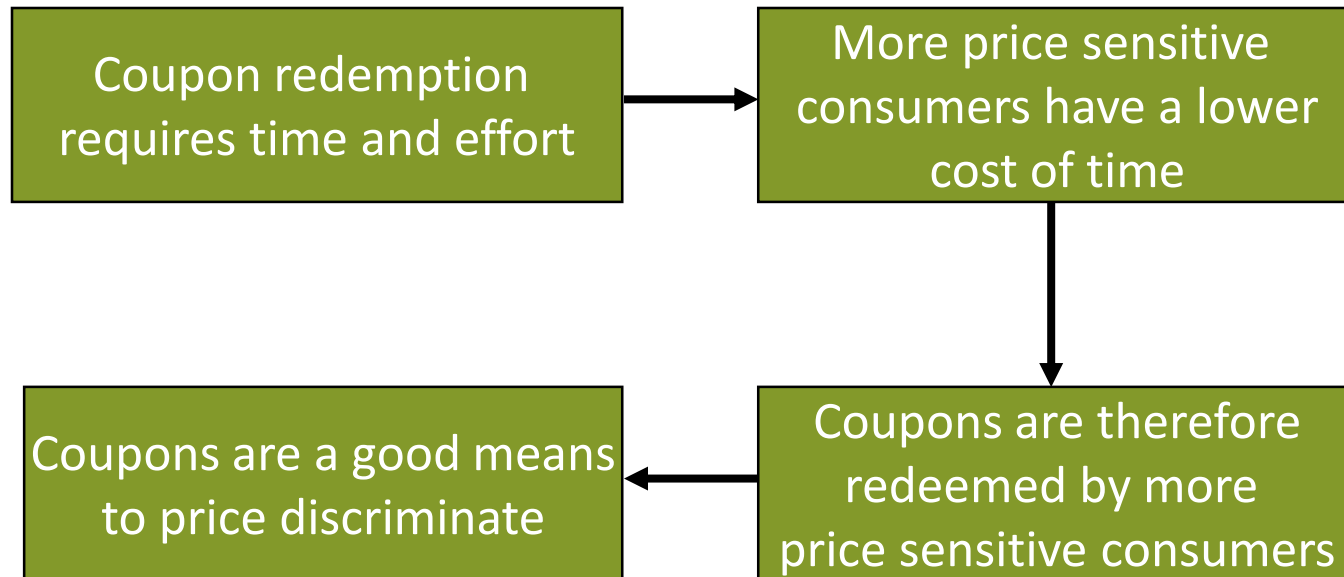
Promotion Type	Effect on Sales
15% TPR	35%
15% TPR + Feature	173%
15% TPR + Display	279%
15% TPR + Feature + Display	545%

“Newspaper” Coupons

- “Newspaper” coupons
 - Available to everyone
 - Customers self select into using them or not
- Nearly 300 billion coupons distributed each year
- A little over 1% get redeemed each year
- Initial use of coupons was to induce trial of new products
 - That alone does not justify 300 billion a year
- Used as a means of price-discrimination

“Newspaper” Coupons as a Price Discrimination Device

- Traditional argument



- Ability of coupons to price-discriminate has reduced considerably!
- Focus has shifted on better design of coupons

Coupon Design

- Expiration dates
 - Create urgency
- Group coupons
 - Leverage quantity discounts!
- Coupon platforms
 - Increase discovery
- Method of Distribution
 - In-store
 - Targeted Promotions
 - Through the “package”

“Package” Coupons

- Three types of “package” coupons:
 - peel-off
 - in-pack
 - on-pack

Comparison

- Let us assume we offer a \$10 package coupon:
 - Peel-Off: Attract new customers but have no ability to retain existing customers
 - In-pack: No ability to attract new customers – only retention effect
 - On-pack: The effect is split between retention and acquisition
- Do keep in mind it is the same \$10 – just offered in different ways

Field Experiments

- Conducted on UCLA Campus – student stores, other stores near campus
- Product categories:
 - Soft drinks
 - Yogurt
 - Chips
- Offered peel-off, in-pack, on-pack coupons
- Consumers bought products in their natural setting – actually paid for the product, redeemed coupons and so on

Results

Coupon 20 oz	Coupon 14 oz	Category Sales	Share 20 oz
No Coupon	No Coupon	616	-
PO	OP	388	0.549
OP	OP	575	0.569
IP	OP	656	0.543
OP	IP	582	0.615
PO	IP	445	0.602
IP	IP	636	0.593
OP	PO	634	0.604
IP	PO	616	0.558
PO	PO	614	0.562

Results

Coupon 20 oz	Coupon 14 oz	Category Sales	%Profit 20 oz
No Coupon	No Coupon	616	-
PO	OP	388	-4.30
OP	OP	575	+2.56
IP	OP	656	-1.51
OP	IP	582	+10.71
PO	IP	445	+5.65
IP	IP	636	+8.16
OP	PO	634	+9.10
IP	PO	616	+2.30
PO	PO	614	-1.83

Research Summary

- Package coupons are better than almost all other means of offering short-term price discounts
- On-packs outperform the other two package coupons
 - Will this always be the case?
- Reason: peel-offs help acquire competitors' customers, in-pack help retain own customers, but on-packs balance acquisition with retention

Summary

- Trade and Consumer Promotions are not avoidable
- Key is to use them effectively
- Trade Promotions
 - Scan-back allowances
 - Create pressure for pass through
- Consumer Promotions
 - Use “package” coupons over “newspaper” coupons
 - Strong interaction between advertising and promotions

Last Class

- Session 5
 - Competitive Pricing
 - Tweeter Case Discussion