Geo-conquesting: Competitive Locational Targeting of Mobile Promotions

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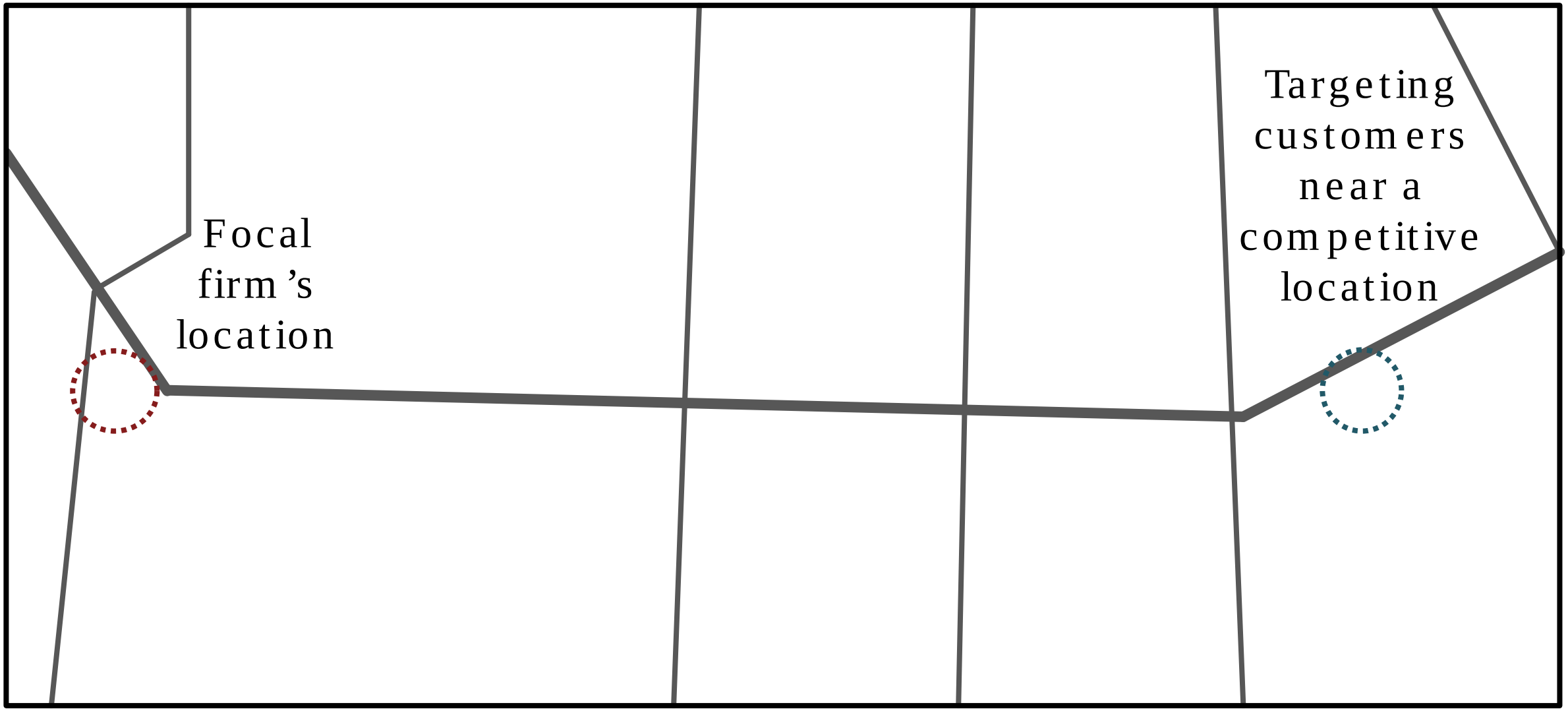
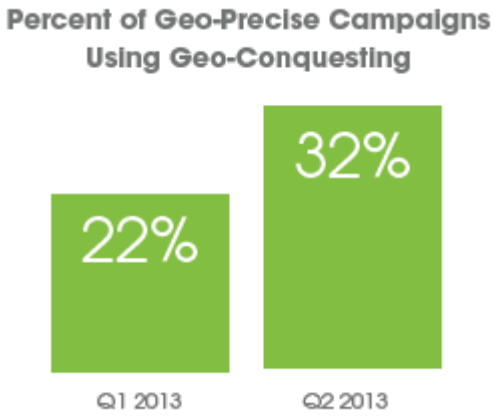
Geo-conquesting

- Mobile platforms have enabled a new form of competitive targeting called geo-conquesting

- Sending coupons or information to potential customers near a competitor's business


Focal firm's location
Targeting customers near a competitive location

Growing Popularity

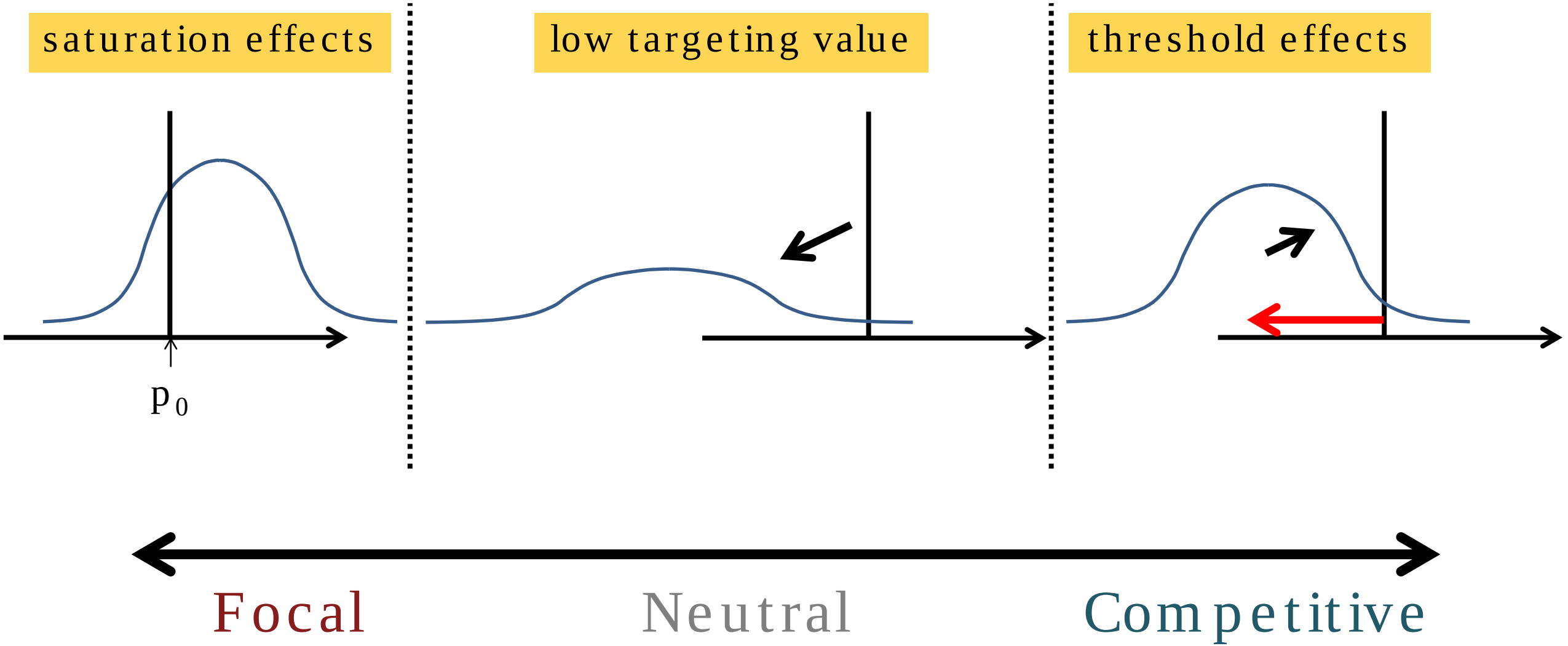


Top Mobile Ad Categories (Q2 2013)	Top Geo-Conquesting Ad Categories (Q2 2013)
1 Financial Services/Insurance	1 Restaurants
2 Telecommunications	2 Retail
3 Restaurants	3 Financial Services/Insurance
4 Retail	4 Travel
5 Auto	5 Gas & Convenience

Source: xAd Mobile Location Insights Q2 2013

Highly Effective?

- Geo-conquesting delivered high coupon redemption:
  - Dunkin': 3.6%
  - Dept. store: 2%
- Need an experiment to isolate targeting effects



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Predictions

- Competitive locational targeting works!
  - Show by varying location and timing

- Switching costs shift reservation values
  - Concave discount sensitivity near focal firm
  - Convex discount sensitivity near competitor

Our Empirical Setting: Movie Tickets

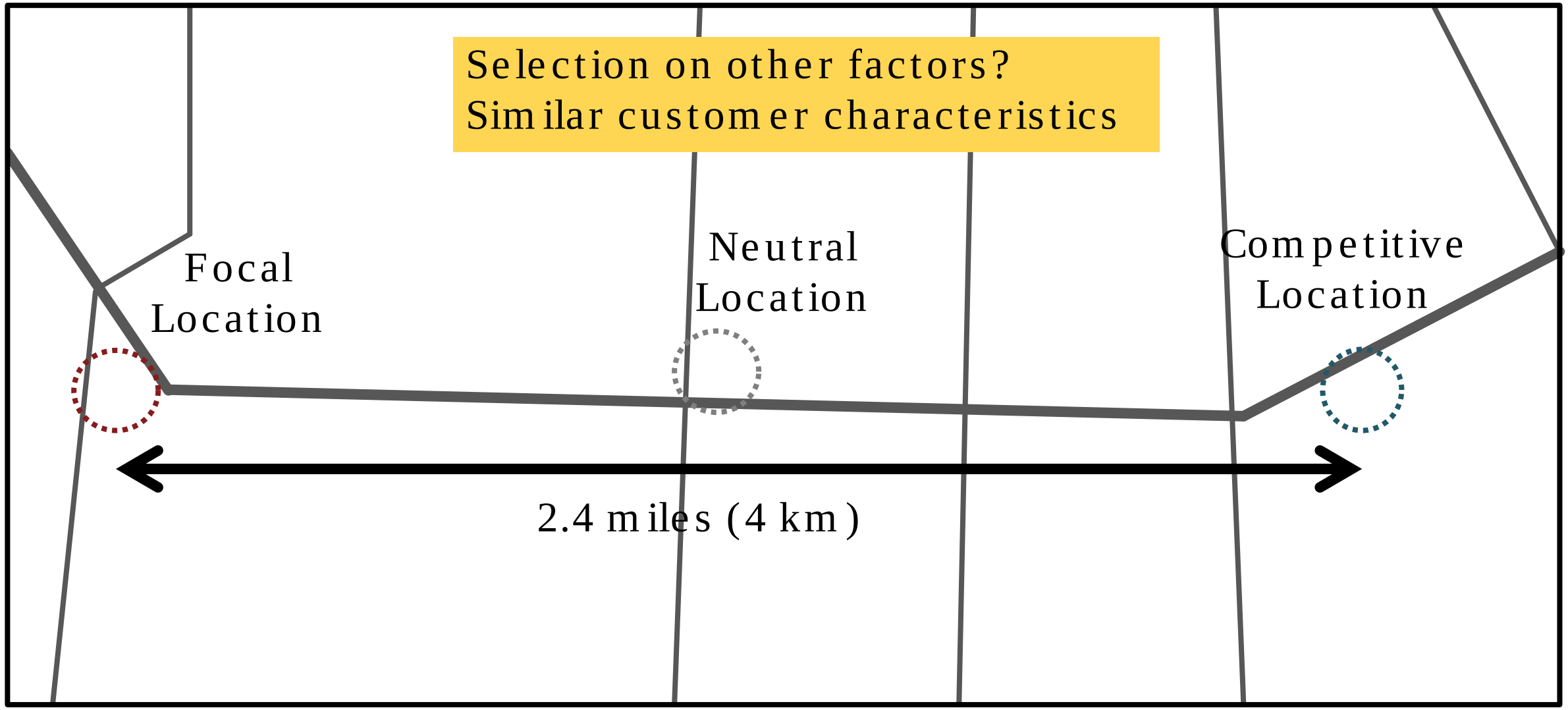
- Demand is context-sensitive
- Differentiated mainly by location
- No resale or storage
- Sensitive to promotions
- High fixed costs

Photo: Thomas Hawk

Experimental Design

3

- Targeting 3 locations
  - Near the focal retailer
  - Near a competitor's location
  - Similarly trafficked neutral location
- Offer timing: now or same time next week
- Random assignment of promotion depth
  - e.g. 20%, 40%, 60% discount


Selection on other factors?
Similar customer characteristics
Focal Location
Neutral Location
Competitive Location
2.4 miles (4 km)

Experimental Design

3

- Targeting 3 locations
  - Near the focal retailer
  - Near a competitor's location
  - Similarly trafficked neutral location

Targeting effect to be measured against within-sample baseline

×2

- Offer timing: now or same time next week

Randomized non-targeted group identifies real-time effect

- Random assignment of promotion depth
  - e.g. 20%, 40%, 60% discount

Experimental Design

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- Targeting 3 locations
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×2
- Offer timing: now or same time next week

×3
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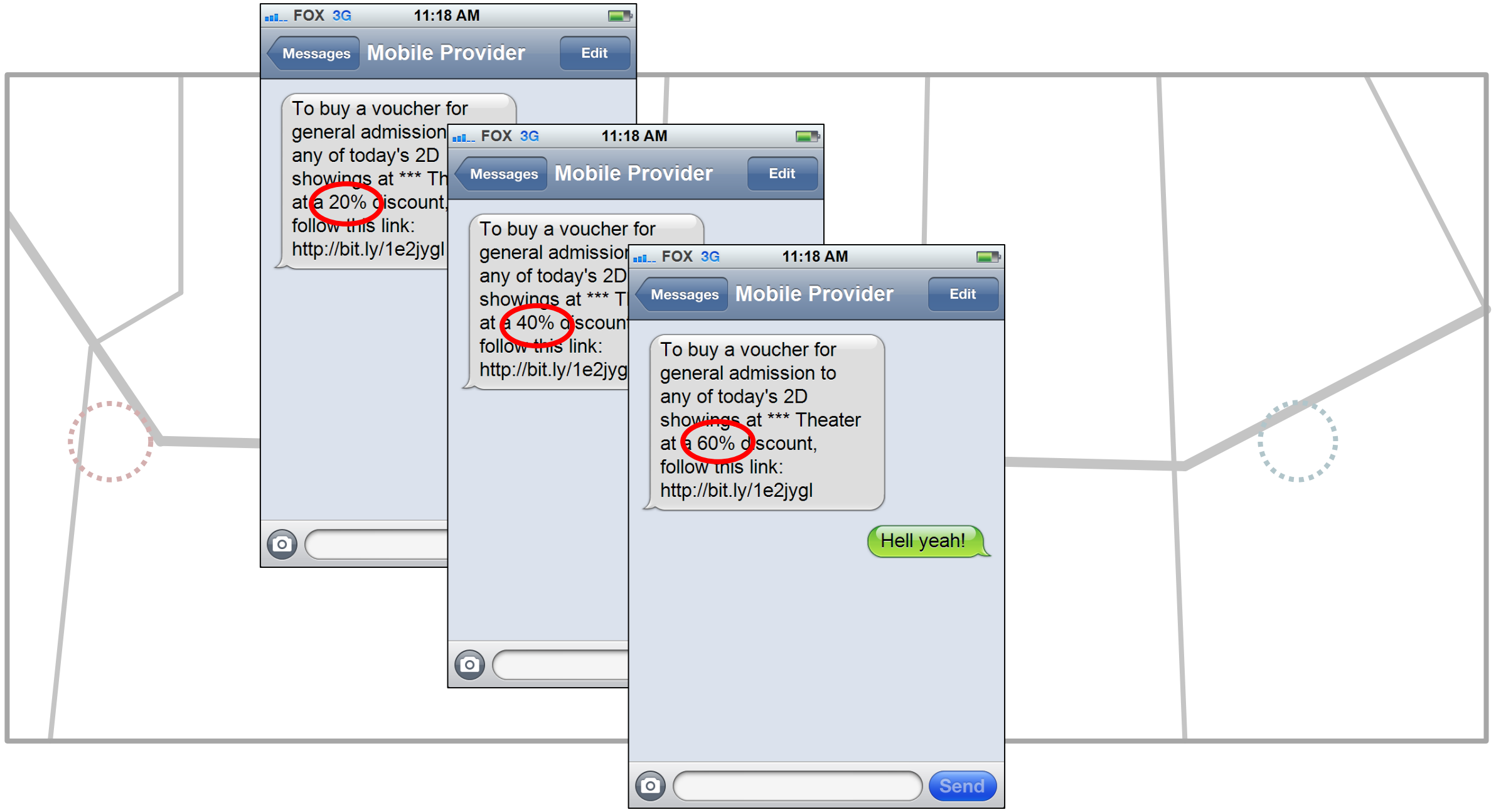

FOX 3G
11:18 AM
Messages
Mobile Provider
Edit
To buy a voucher for general admission to any of today's 2D showings at *** Theater at a 20% discount, follow this link: http://bit.ly/1e2jygl
FOX 3G
11:18 AM
Messages
Mobile Provider
Edit
To buy a voucher for general admission to any of today's 2D showings at *** Theater at a 40% discount, follow this link: http://bit.ly/1e2jygl
FOX 3G
11:18 AM
Messages
Mobile Provider
Edit
To buy a voucher for general admission to any of today's 2D showings at *** Theater at a 60% discount, follow this link: http://bit.ly/1e2jygl
Hell yeah!
Send

Experimental Design

3

- Targeting 3 locations
  - Near the focal retailer
  - Near a competitor's location
  - Similarly trafficked neutral location

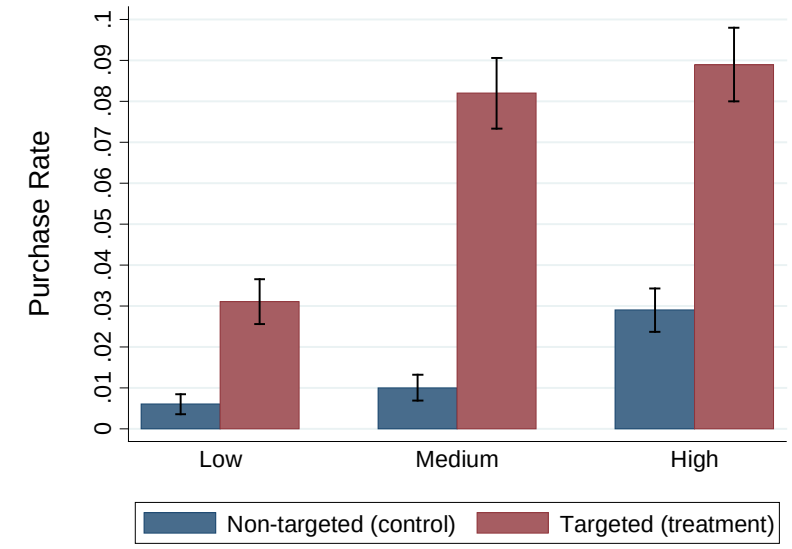
N = 1,000 per cell
(18,000 total)

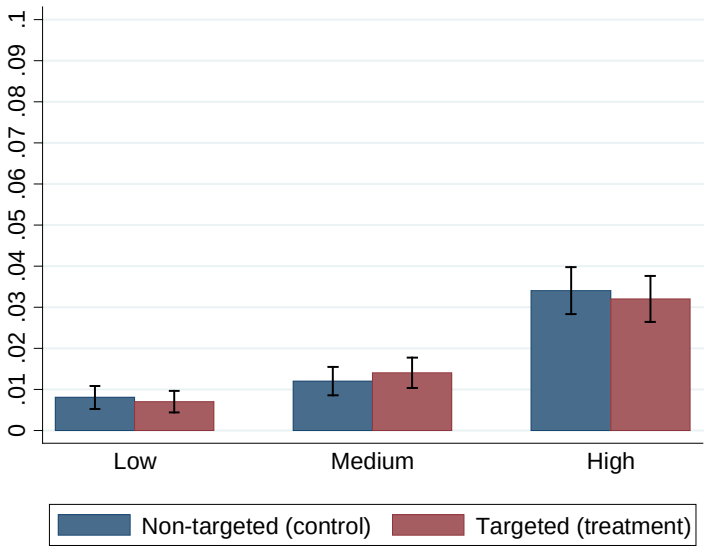
×2

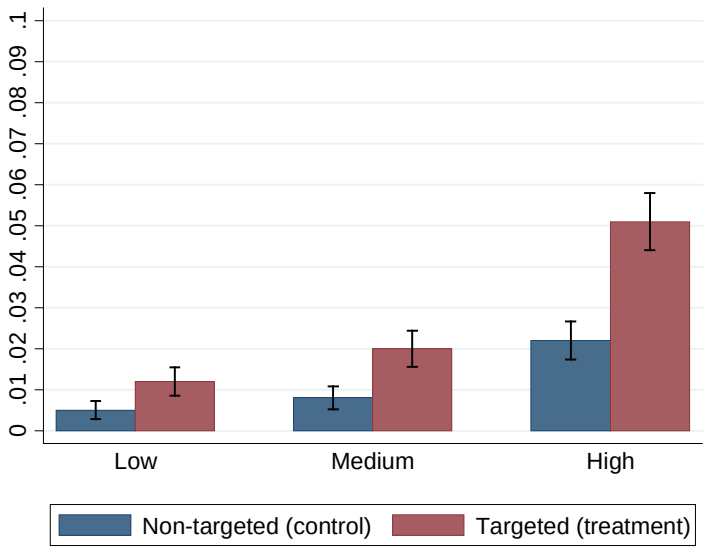
- Offer timing: now or same time next week

×3

- Random assignment of promotion depth
  - e.g. 20%, 40%, 60% discount







Focal Neutral Competitive

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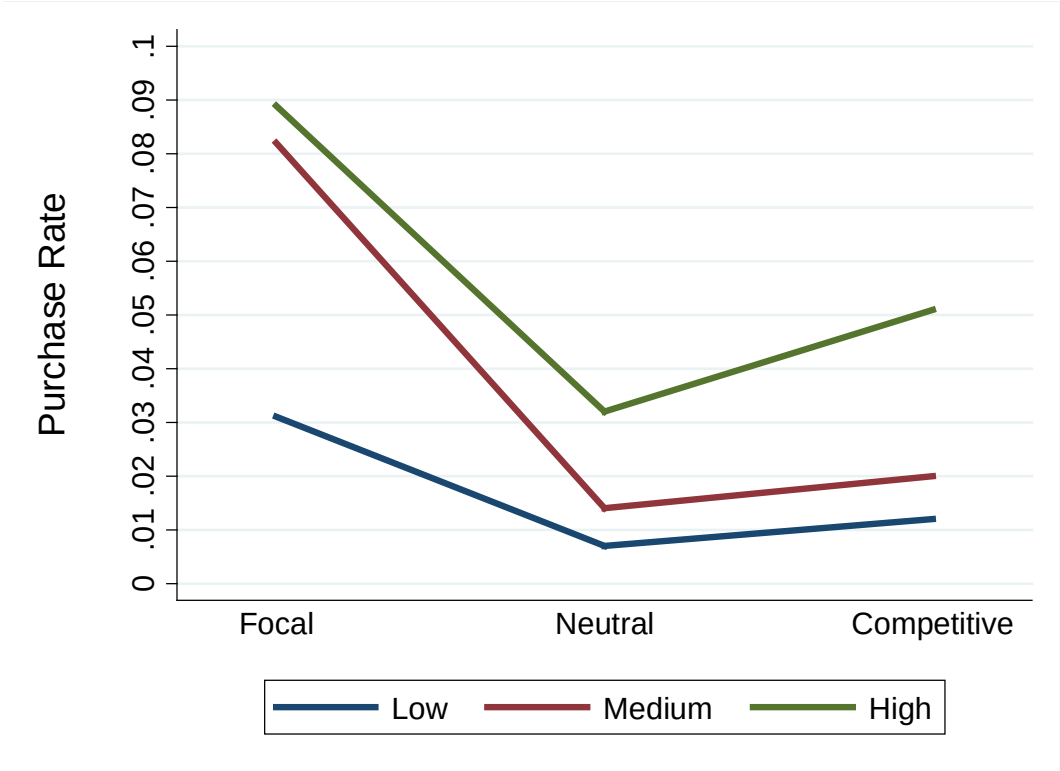
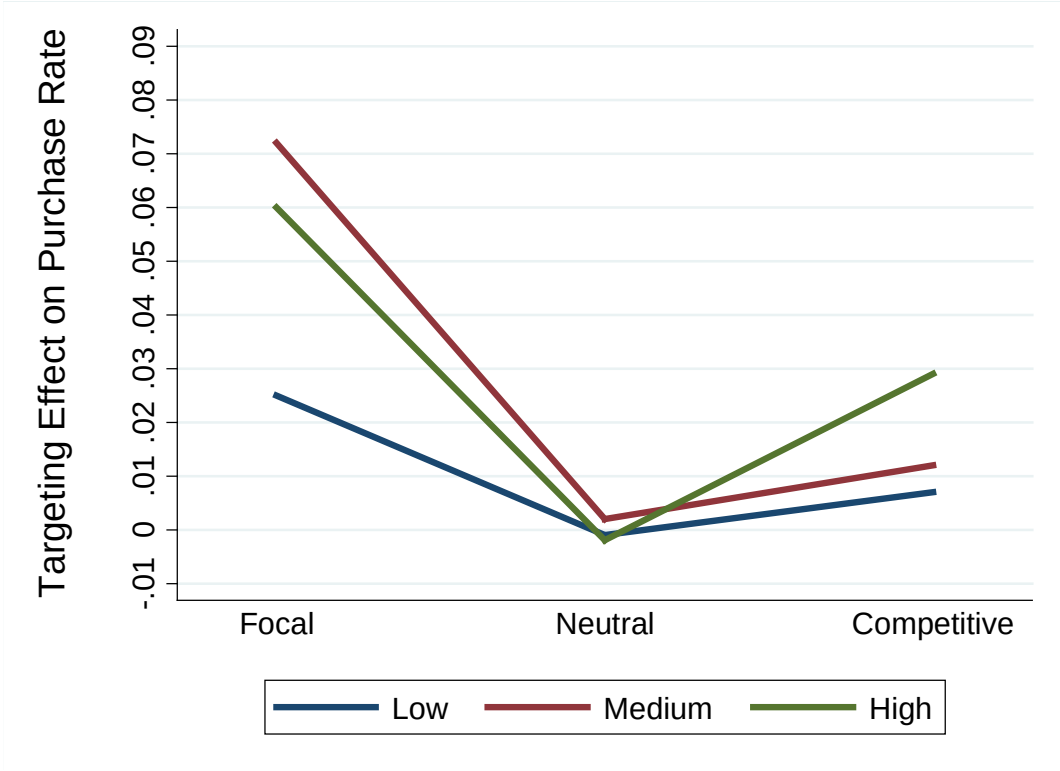
J-shaped Response to Location





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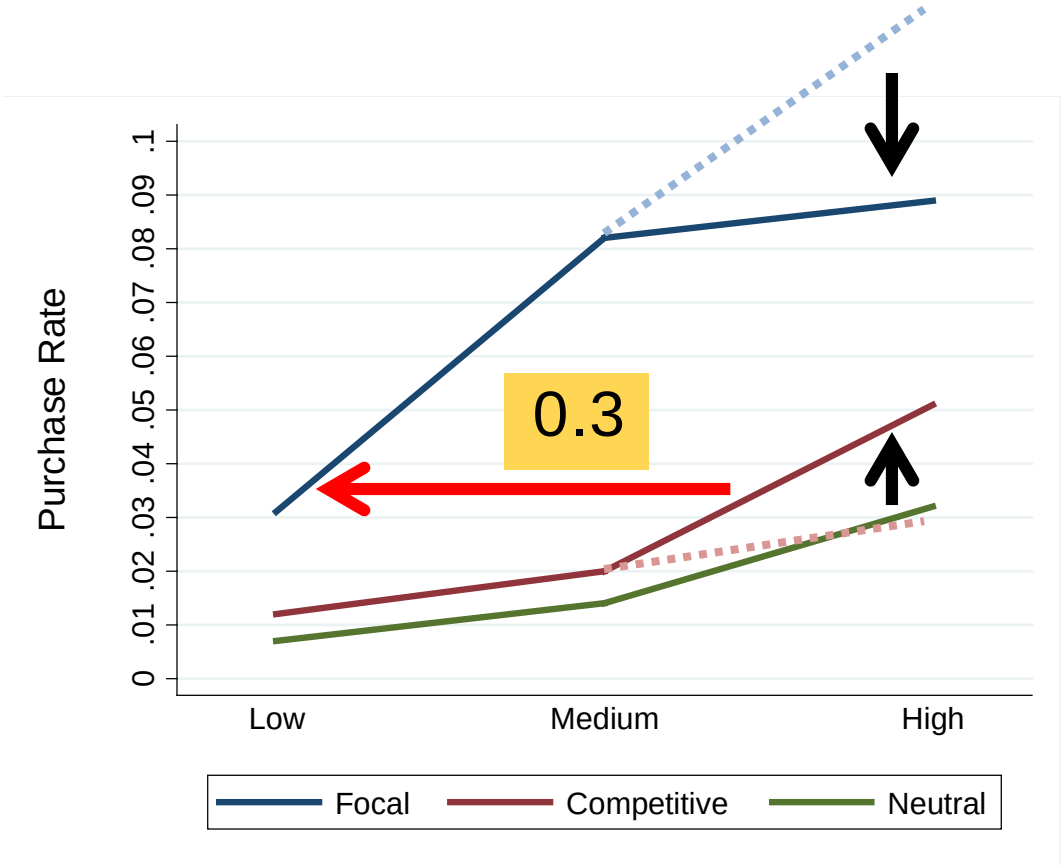
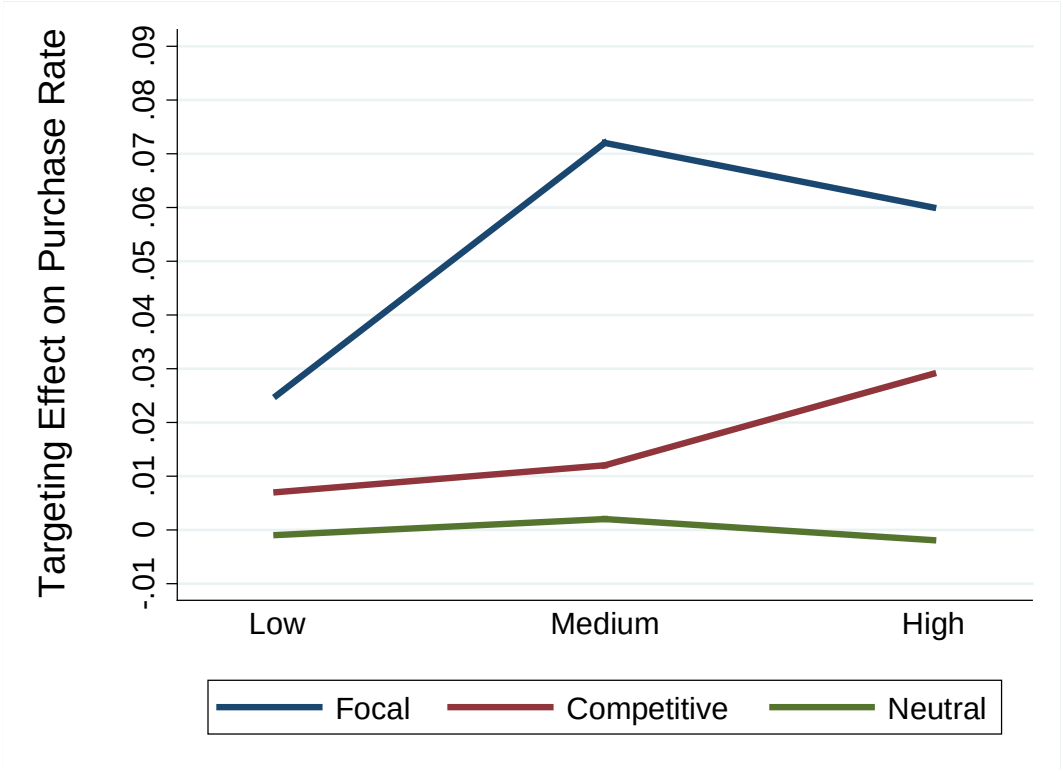
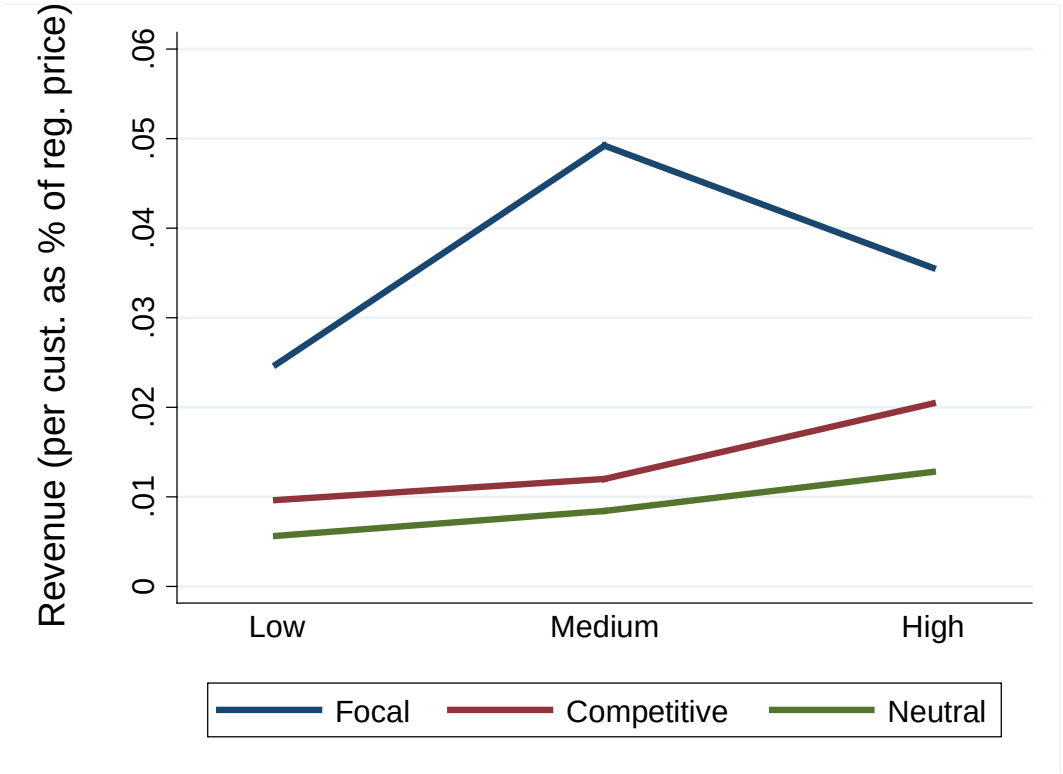
Discount Response Curves

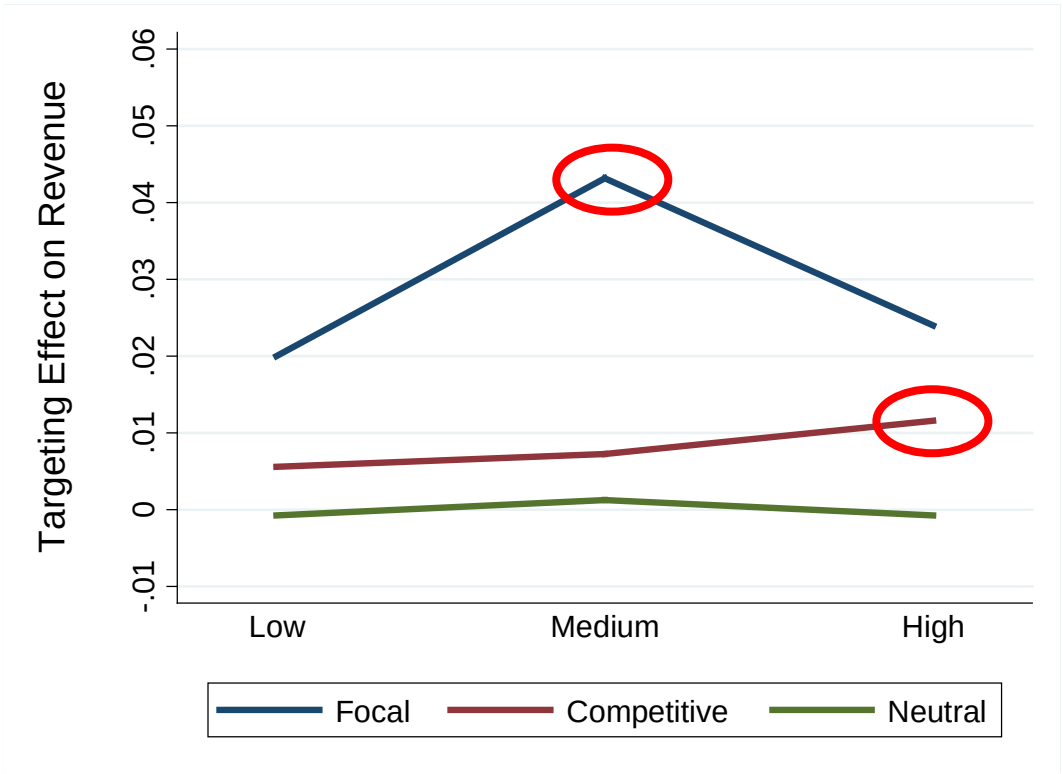




Competitive targeting: higher marginal effects for deep discounts

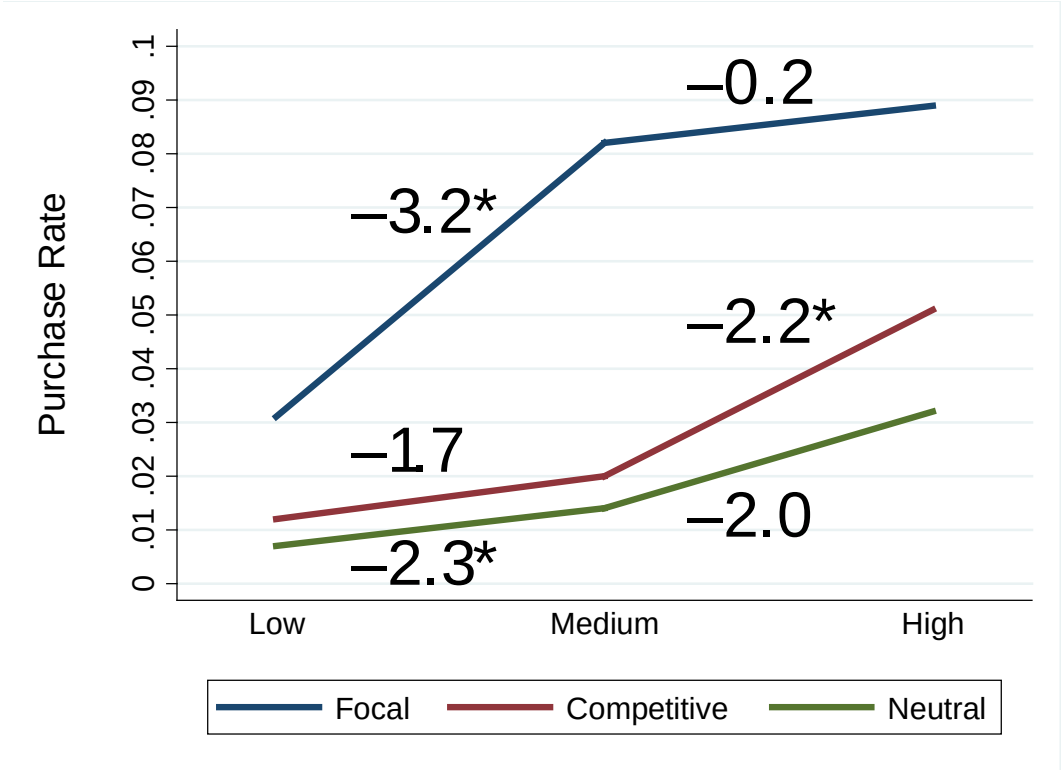
Revenue Maximizing Discounts

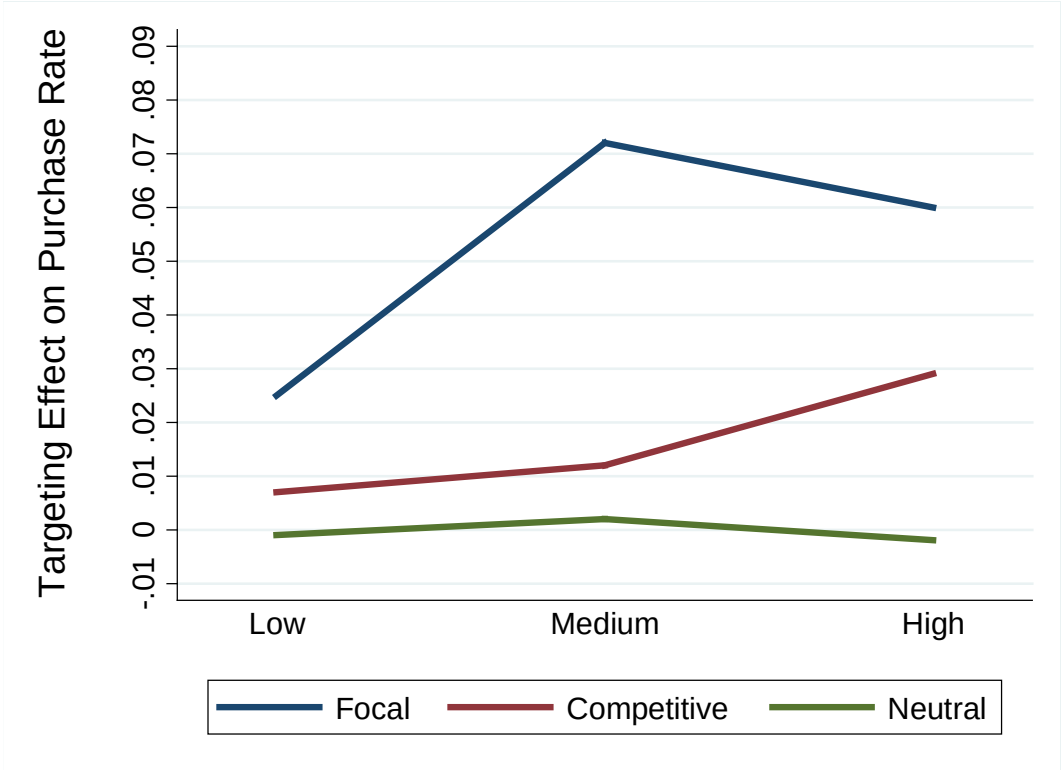




Estimates monetary value of locational targeting

Promotional Elasticities





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Testing for Concavity/Convexity

	Focal	Competitive	Neutral
High	8.9%	5.1%	3.2%
Medium	8.2%	2.0%	1.4%
Low	3.1%	1.2%	0.7%
High – Medium	0.7%	3.1% **	1.8% **
Medium – Low	5.1% **	0.8%	0.7%
Diff-in-diff	–4.4% **	2.3% *	1.1%
Diff-in-diff-in-diff	6.7% **		

Limitations and Extensions

- Strategic response
  - Competitive response
  - Customer response

- Effectiveness in other categories?
  - Context very important (retail, restaurants)
  - Need multivariate design

Conclusions

- Investigates an emerging tactic using mobile
  - Attribution to locational targeting
  - Effective third-degree price discrimination

- Indication of mobile's impact on competition
  - Incentive to go on offensive
  - Testing and measurement offline