

Improving Ecommerce Margins by Adding Search Frictions

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Introduction

- Online retailers often have thinner margins than brick-and-mortar stores
 - Shipping costs are often borne by online retailers
 - Price competition is intensified by price transparency
 - Discounts are used in tandem with other strategies (e.g. newsletter signup) to acquire customers
- Many online store designers try to make it as easy as possible for shoppers to navigate and search for products in a online store

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Price Discrimination | Market Segmentation

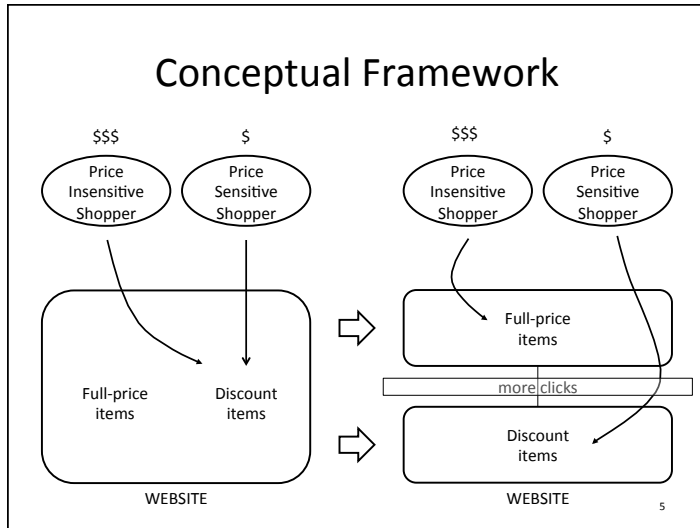
Customization	Self-Selection
<ul style="list-style-type: none">• Different offers for different shoppers• High potential but costly• Potential for perceptions of unfairness	<ul style="list-style-type: none">• All shoppers receive same menu of offers• Shoppers self-select into appropriate options• Lower operational requirements

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Research Question

Can an online retailer improve its margin performance by making its discounted products harder to find?

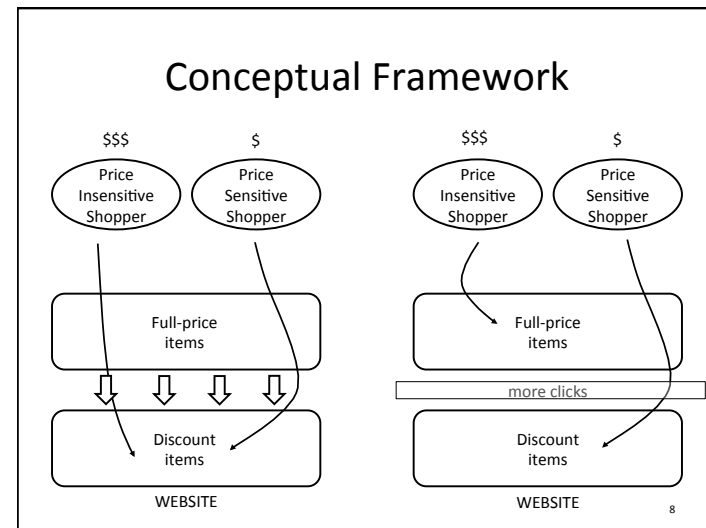
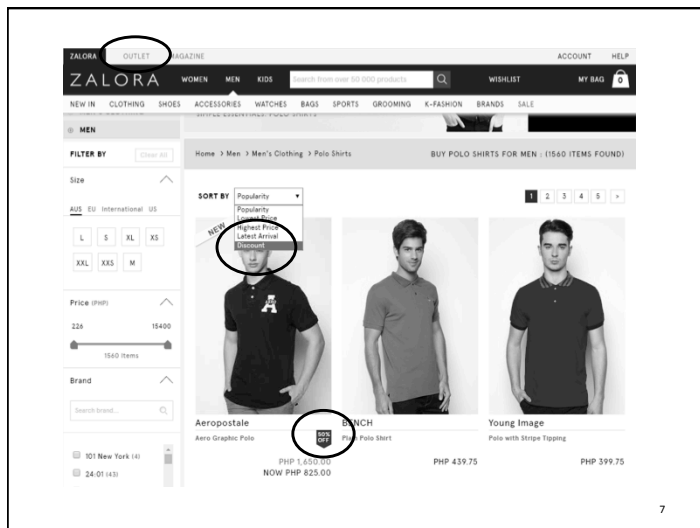
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Partner Company: Zalora

- Online fashion retailer in Southeast Asia
- Headquartered in Singapore; websites in Philippines, Hong Kong, Singapore, Taiwan, Indonesia, Malaysia, Thailand, and Vietnam
- Rocket Internet venture

ZALORA



Experimental Design

Over one week, we randomly assigned new visitors to the website to one of four variations:

Control	Treatment 1	Treatment 2	Treatment 3
<ul style="list-style-type: none"> All navigation features present: outlet link, discount sorting option, and discount markers 	<ul style="list-style-type: none"> No outlet link 	<ul style="list-style-type: none"> No discount sorting option and discount markers 	<ul style="list-style-type: none"> No outlet link, discount sorting option, and discount markers

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Tracked Outcome Variables

Average basket discount

- Average of percent taken off list prices over items in each order
- Primary objective is to decrease this (without changes in assortment)

Conversion rate

- Percent of visitors that make a purchase
- We want to ensure that conversion does not suffer (possibly due to perceived higher prices by price sensitive shoppers)

Basket size

- Total amount spent on each transaction
- We want to ensure that basket size remains stable (and that shoppers do not trade down to lower priced items)

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Results

	Visitors	Transactions	Markdown	H ₀ : Control = Treatment	Conversion rate	H ₀ : Control = Treatment	Basket size (Pesos)	H ₀ : Control = Treatment
Control	26,014	318	14.53%		1.22%		1610	
Treatment 1: No link to outlet section	26,199	355	11.56%	p=0.03	1.36%	p=0.09	1776	p=0.24
Treatment 2: No discount flags/sorting	26,343	355	12.23%	p=0.08	1.35%	p=0.10	2281	p=0.00
Treatment 3: No outlet, discount flags & sorting	26,049	334	11.96%	p=0.05	1.28%	p=0.27	1827	p=0.22
Total	104,605	1,362			1.30%			

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Summary of results

In each of the three treatment groups:

- Shoppers bought items at much lower discounts
- Conversion did not suffer
- Total amount spent was stable

While products and prices available on the website remained unchanged

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Conclusion + Implications

- We find that selectively inducing search frictions on a retail website can increase margins by as much as 20% without negatively affecting conversion
- This represents a cost neutral change in selling strategy that promises significant potential returns

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Caveats

- Increased search frictions on a website may drive consumers to the competitor's website
- Long-term performance may be harmed as consumers form expectations about an online store'

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