

Too Risky :

Trust, Safety, and Simplicity

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Market Safety

Market Establishment

Over-informed Market

Market Design Case

Market Design Problem

—Market Safety —————

Making Markets Safe

Unsafe markets

Illegal markets



Robbery



Dishonesty



Safe markets

Reputation

Reliability

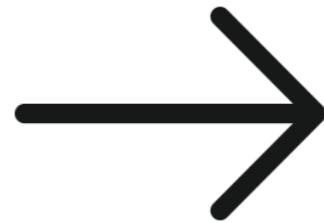
Trustworthy

A lot more difficult on the Internet.



— MARKET ESTABLISHMENT —

A Good Name

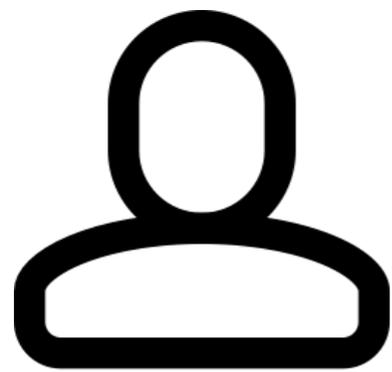


- ➔ Providing secure methods for payment
 - ➔ Providing insurance for transactions that go bad
 - ➔ Building feedback systems to develop reputations

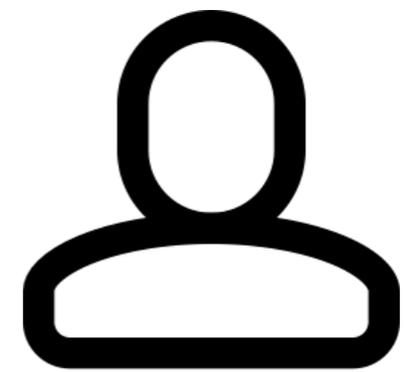
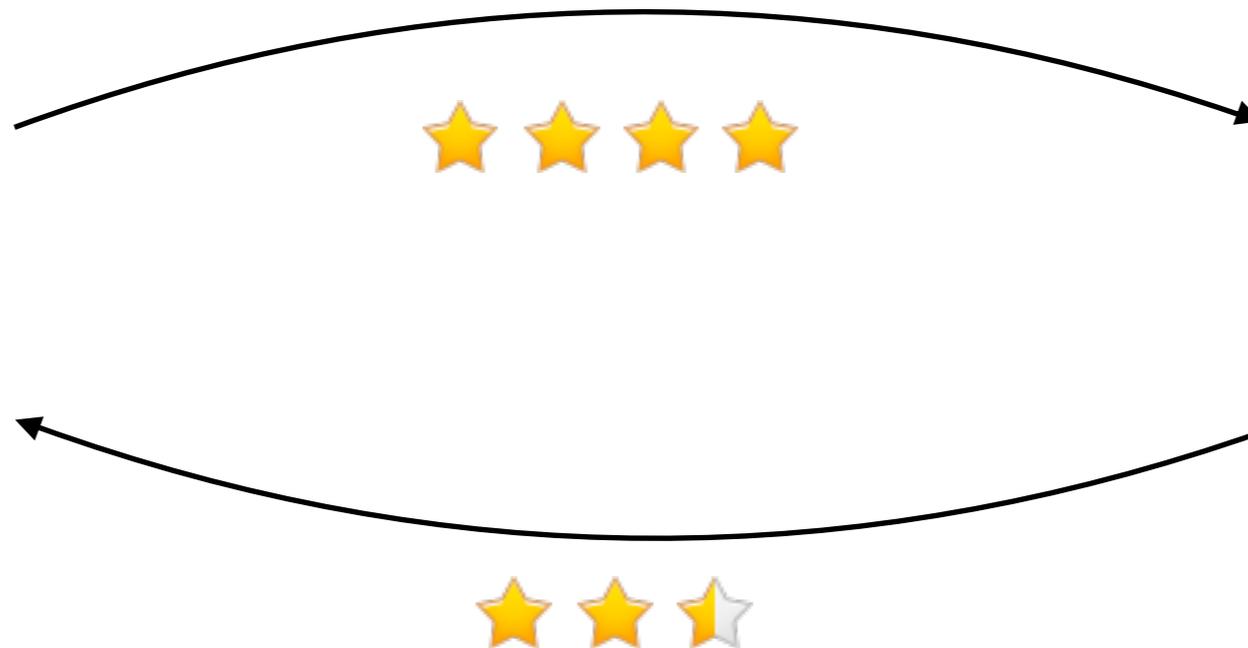
eBay



- ➔ Founded in 1995
- ➔ 1 billion listings
- ➔ Revenue: 9 billion USD (2016)



Buyer



Seller

The Rating System

The Rating System

1 Open to everyone → Feedback Stuffing

2 Only for bid winner → Reciprocal



3 Rating anonymously → Accurate

- Positive
- Neutral
- Negative

e-commercemonza (2255 ★)
Positive Feedback (last 12 months):
99.8%

The Rating System



Markets depend on reliable information.

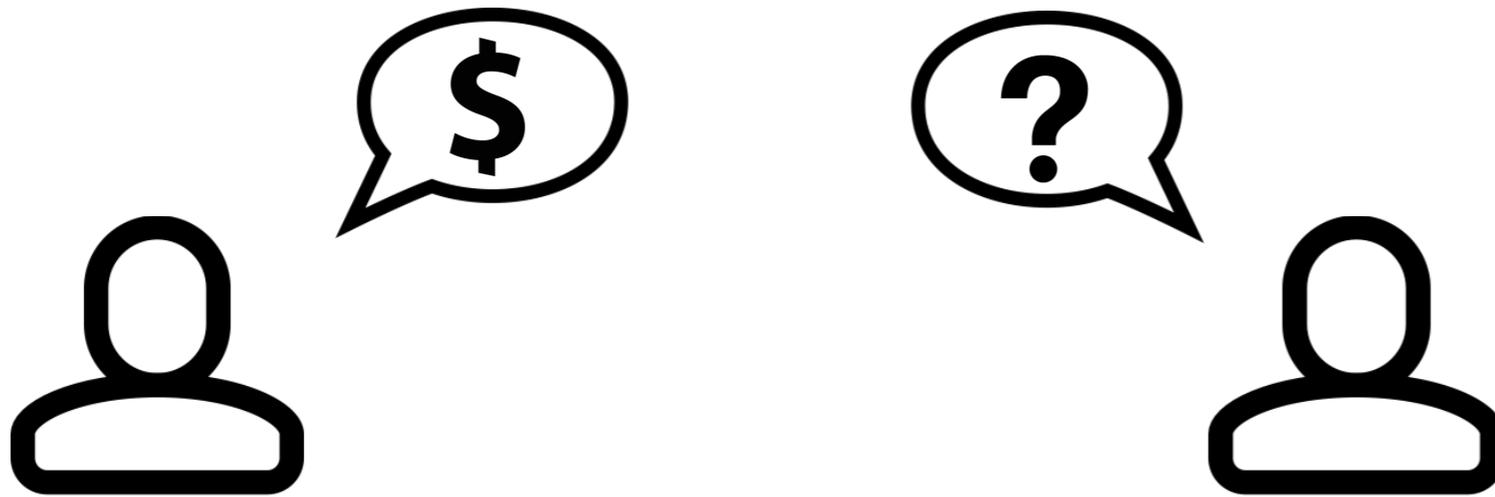
—Over-informed Market —

The Price War

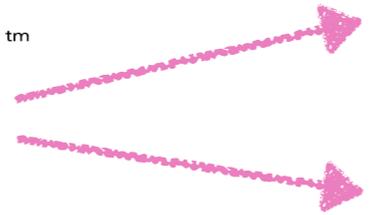


Straight Buy

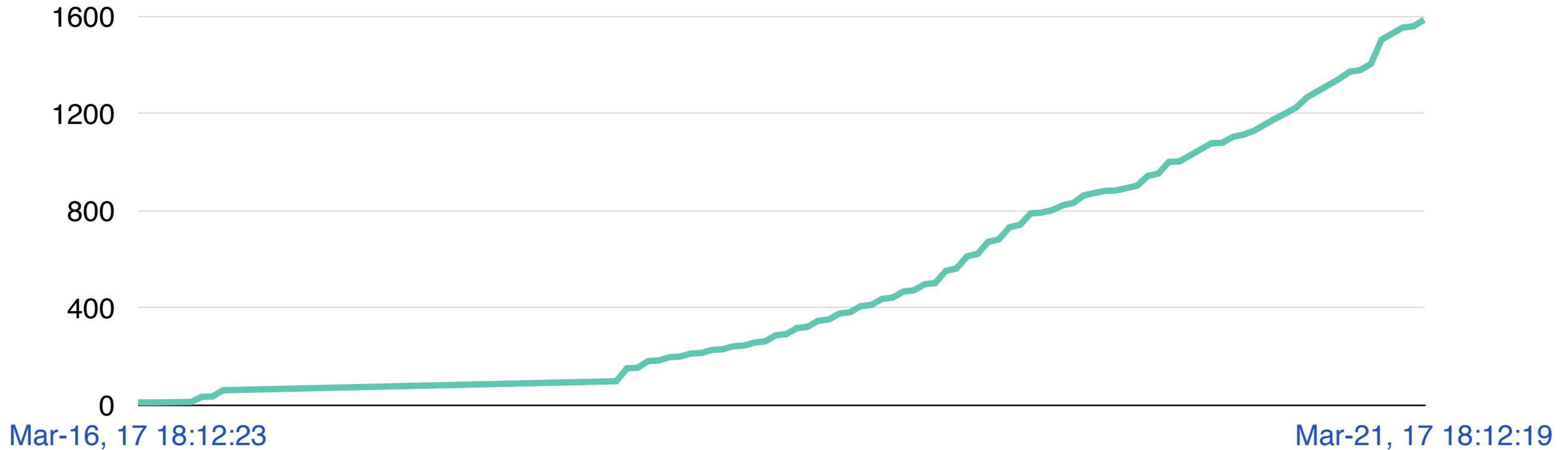
Auction



Bidding

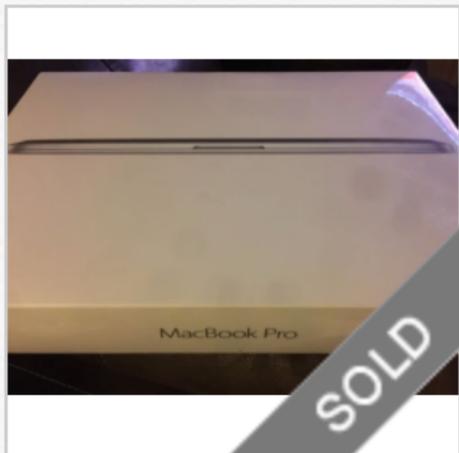


Giving Out Too Much



NEW IN BOX Apple 13 MacBook Pro Retina APPLE CARE 2015 3.1GHz i7 512 SSD 8 GB

★★★★★ 1 product rating | [Write a review](#) | [See original listing](#)



Item condition: **New**

Ended: Mar 21, 2017, 9:12AM

Winning bid: **US \$1,583.00** [66 bids]

Approximately **NT\$ 48,000**

Shipping: **\$51.42** International Priority Shipping to Taiwan via the Global Shipping Program

Item location: Crown Point, Indiana, United States

Seller: [callmedeaconblues](#) (1671 ★) | [Seller's other items](#)

Giving Out Too Much



Bidding

Straight Bidding

\$1,100

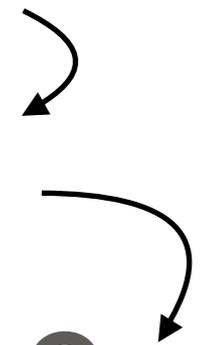


Incremental Bidding

\$100

\$200

\$1,100



The Snipe

Bidders: 20 Bids: 66 Time Ended: Mar-21-17 18:12:23 PDT Duration: 5 days

 This item has ended.

Automatic bids may be placed days or hours before a listing ends. [Learn more about bidding.](#)

[Hide automatic bids](#)

Bidder 	Bid Amount	Bid Time
l***l (113 )	US \$1,583.00	Mar-21-17 18:12:19 PDT
t***z (365 )	US \$1,558.00	Mar-21-17 18:12:16 PDT
t***z (365 )	US \$1,553.00	Mar-21-17 18:12:16 PDT
f***g (255 )	US \$1,528.00	Mar-21-17 18:12:04 PDT
l***l (113 )	US \$1,503.00	Mar-21-17 18:11:59 PDT
l***l (113 )	US \$1,403.00	Mar-21-17 18:11:59 PDT
f***g (255 )	US \$1,378.00	Mar-21-17 10:56:50 PDT
0***m (252 )	US \$1,371.00	Mar-21-17 15:28:33 PDT
f***g (255 )	US \$1,341.00	Mar-21-17 10:56:50 PDT
l***s (14810 )	US \$1,316.00	Mar-21-17 14:10:17 PDT
f***g (255 )	US \$1,291.00	Mar-21-17 10:56:50 PDT
l***s (14810 )	US \$1,266.00	Mar-21-17 14:10:09 PDT

Market Failure

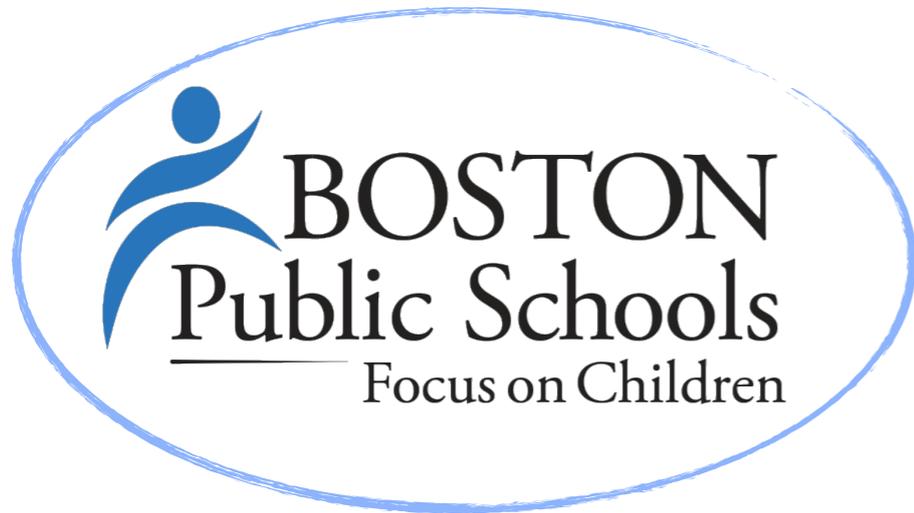


— MARKET DESIGN CASE —

Boston Public Schools



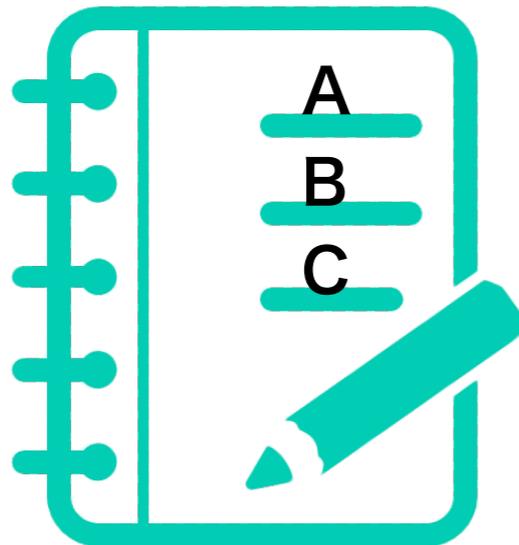
School Assignment System



- Families rank-order lists of schools
- Assignment algorithm
- Children admitted to a single school

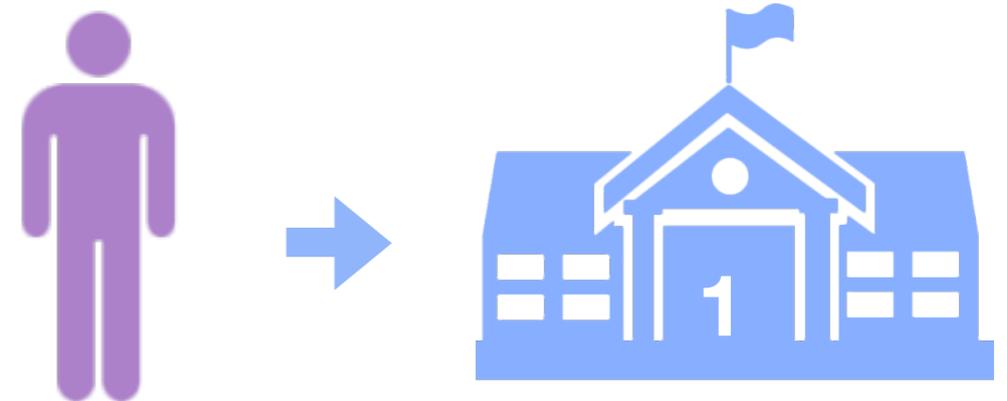
Step 1

List at least three schools.



Step 2

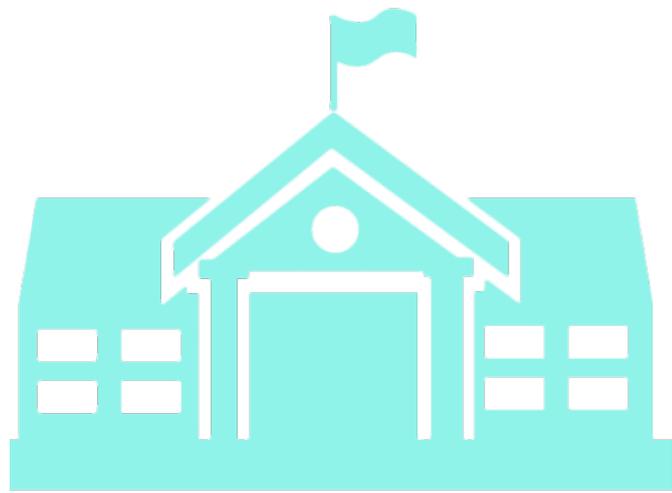
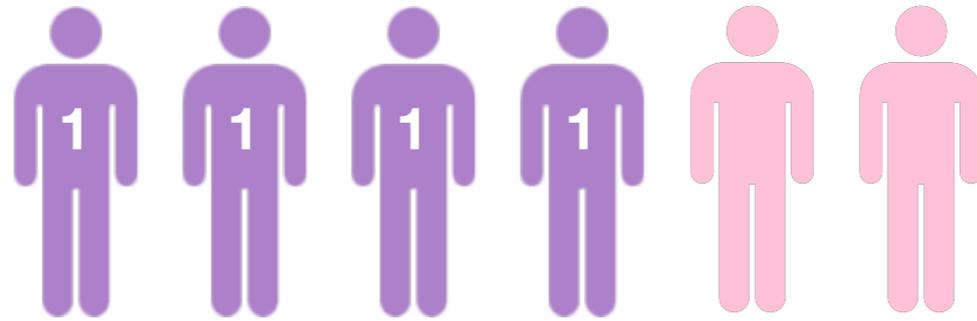
Put the most children in their first choice schools.



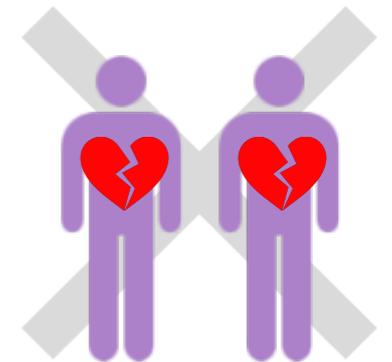
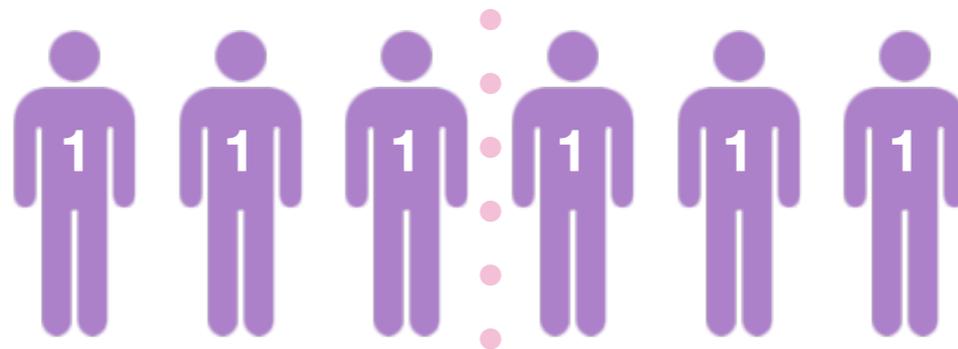
School Assignment System

Step 3

First choice children $<$ Places



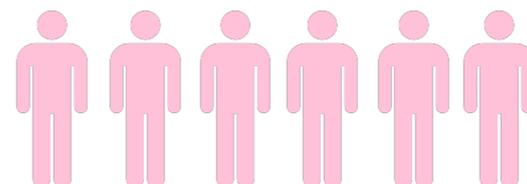
First choice children $>$ Places



Admits the highest-priority students who had ranked it first.

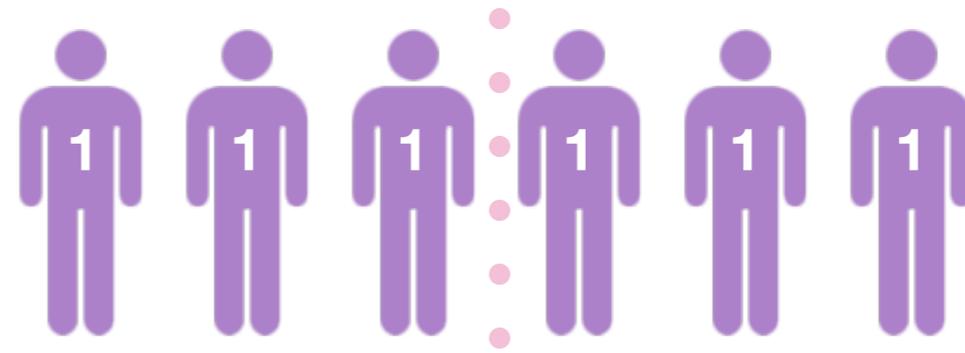
Step 4

Put as many remaining students in their second choice.



School Assignment System

Priority Order

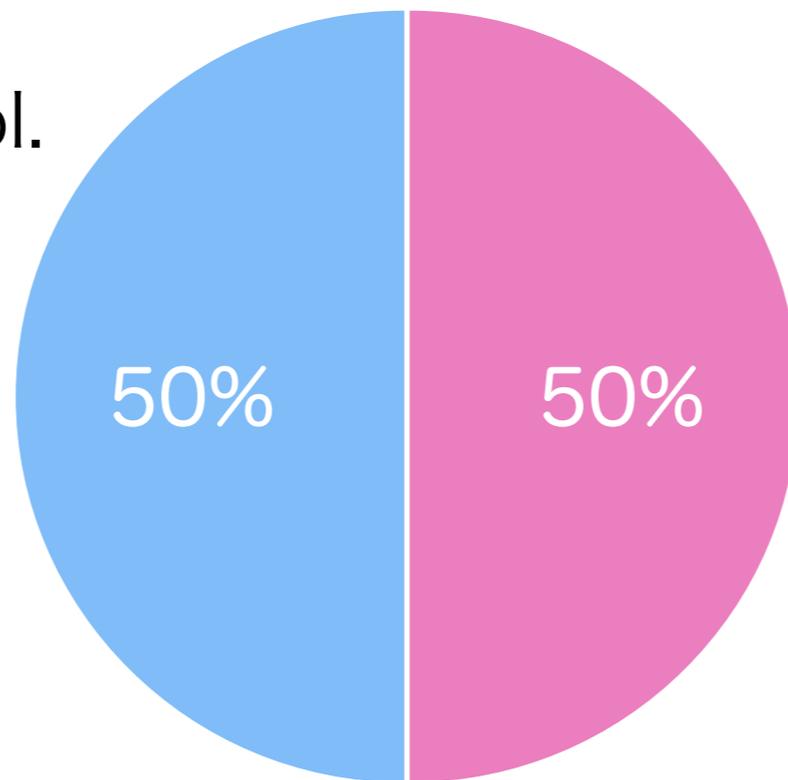


1 Had older siblings attending the school.

2 Live in “walk zone.”



Places



—MARKET DESIGN PROBLEM—

Tom's Case

How should I list my choices?

School A

- Distant school
- First choice
- Popular
- Full-day



School B

- "Walk Zone" school
- Priority!
- Popular
- Half-day



Strategic Choice

School B First

“Walk Zone” school: priority children



Listed as first choice



Extremely high chance



School A First

Win lottery → Get admitted to **school A.**

Lose → School B has empty places. → school B

School B is filled with first choice students. → school C

school C is full →

★ End up with none of his choices → **unpopular school**



What is the problem?

80% of the children are assigned to their first choice.

Successful?

- Only playing it safe.
- Parents can't make their first choice the first choice.



Economic laboratory experiment



Switching the popularity rank of schools to different amounts of cash prize.

- Most people do not list the highest prize as their first choice.

Economic Experiment



Prize A: \$16

Rules



Prize B: \$13



Prize C: \$11

- Every prize has only a certain number of slots.
- Participants should make a list of three prizes in preference.
- As many first choice participants will be put in each prize.
- If the number exceeds, winners will be selected randomly.



Prize X: \$2

How should you make your list?

The Case of Taiwan

2014 High School Admission System

The lower a school is on your list, the more points get deducted from your overall score when you are competing for that school.

 會考為何淪為選填志願的賭局？

 The News Lens 關鍵評論 12年國教免試入學放榜 學生家長：志願序比重過高像賭博

台灣醒報 6成錄取第一志願 學生卻不開心

 會考生填志願 痛苦想死
家長嗆「蔣偉寧幫忙填」 教部：今年不改

 大學教授痛批：會考成績設計扭曲12年國教

Thank you for your
attention.

