

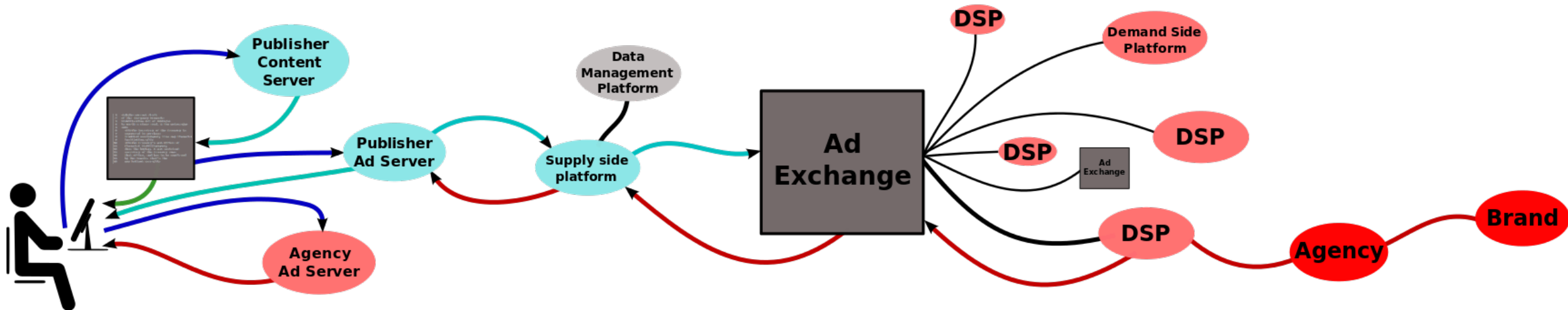
IMC and Advertising Discussion

How can we measure the success of a marketing communication strategy?

– Traditional media

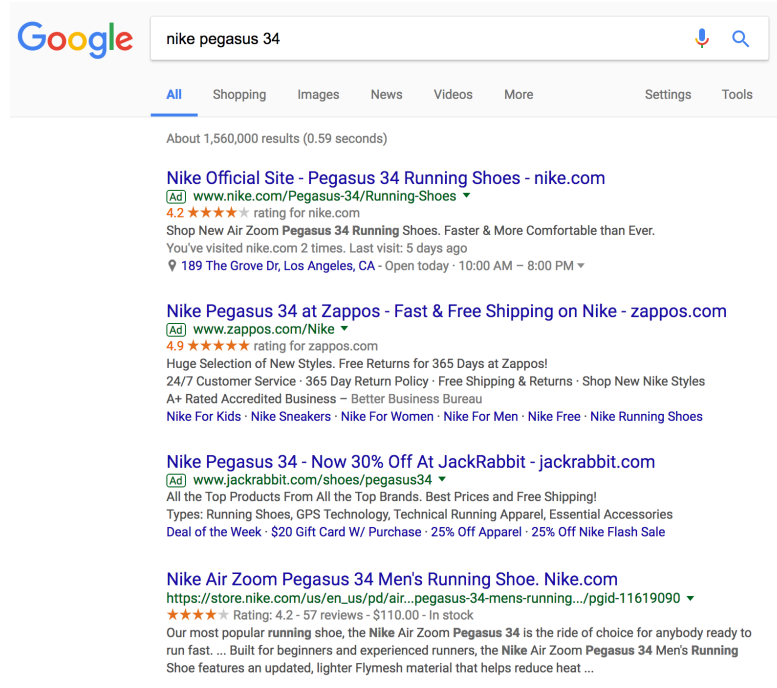
- **Frequency** of exposure
- **Reach** (% target population exposed)
- **Gross Rating Points (GRP)**
 - E.g., 7 Ads in a Magazine, which reach 50% target segment, then $GRP = 7 \times 0.5 = 3.5$ Web
- Time spent on page, page views, clicks, where users come from, etc.

https://en.wikipedia.org/wiki/Online_advertising



- 1. Publisher:** integrates advertisements into its online content
- 2. Advertiser Agency:** creates the ad
- 3. Ad Exchange:** platform that facilitates the buying and selling of media advertising inventory from multiple ad networks

- https://adwords.google.com/home/how-it-works/search-ads/#?modal_active=none
- Video



Three House Brothers:

<https://www.youtube.com/watch?v=LDKYXDZdFU4&feature=youtu.be>

What can we measure?

- **Clicks**
 - # of time a user clicked on the Ad
- **Impressions**
 - # of times the Ad appeared in front of the user
- **Click Through Rates**
 - CTR = Clicks/Impressions
- **Return on Marketing Investment (ROMI)**
 - $\frac{\text{Gross Margin} - \text{Expenditures}}{\text{Expenditures}} \times 100$

Example: NYC Coffee Shop

Sales Margins (%) = 50% (for every sale the owner makes 50% of the total sale)

Campaign	Keywords	Clicks	Marketing Expenditure	Sales
1)	Coffee shop local	50	\$10/day	\$50/day
2)	New York City Coffee shop Organic Coffee	100	\$20/day	\$120/day

$$ROMI = \frac{Gross\ Margin - Expenditures}{Expenditures} \times 100$$

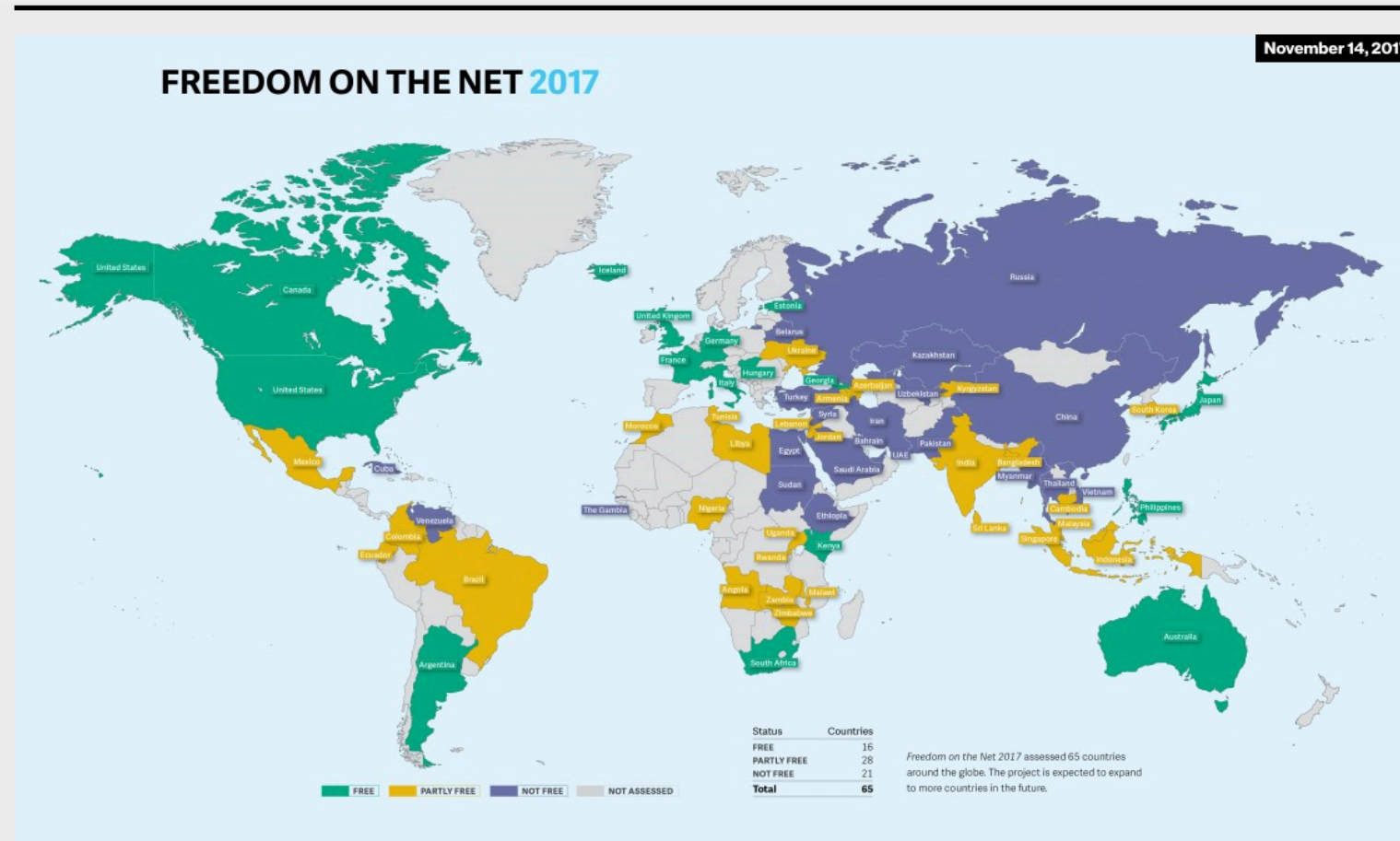
What campaign will you choose based on ROMI?

Example: NYC Coffee Shop

1	2	3	4	5	6	7
Keywords	Clicks	Marketing Expenditure	Sales	Gross Margin Sales = Sales x Sales Margin%	Gross Margin = Col. 5-Col.3	ROMI = Col. 6/Col. 3 x 100
Coffee shop local	50	\$10/day	\$50/day	\$25/day	\$15	150%
New York City Coffee shop Organic Coffee	100	\$20/day	\$120/day	\$60/day	\$40	200%



<https://freedomhouse.org/report/freedom-net/freedom-net-2017>



In 2016 social media was used to influence elections in at least 18 countries

Social election: how social media can bias election

– Facebook

- In a 61-million-person experiment, researchers show that online social networks influence political participation, with close relationships mattering most

Social election: how social media can bias election – Facebook

Treated group



+280K votes!

Control group



+ 60K votes

Social election: how social media can bias election

– Twitter

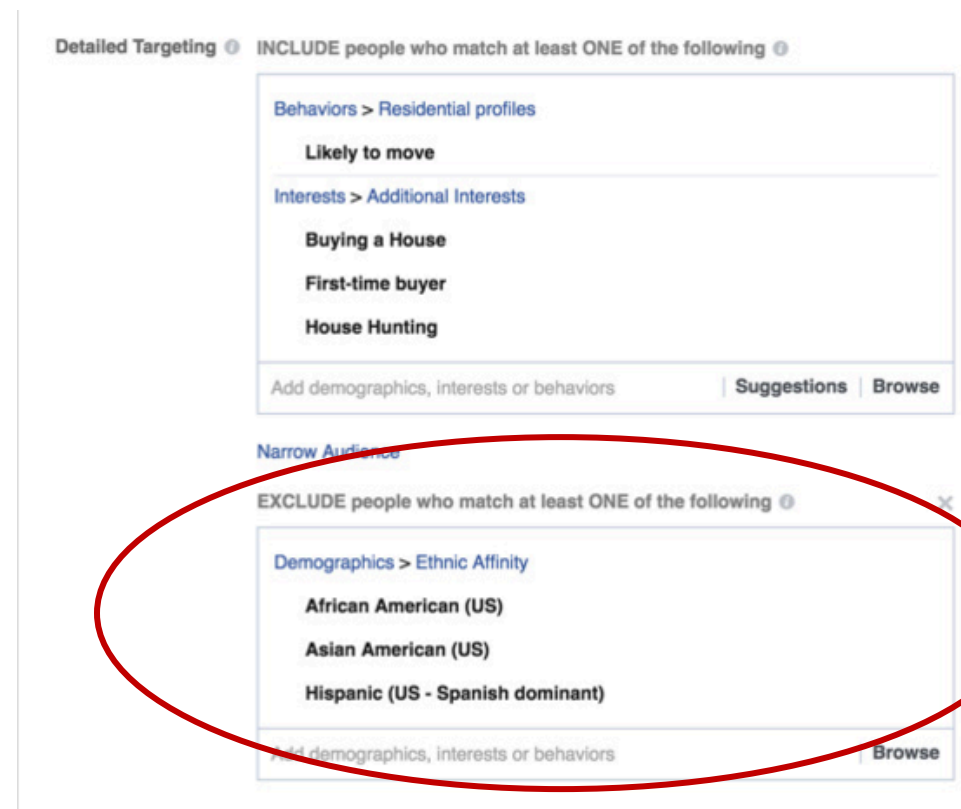
- A surprisingly high percentage of the political discussion that took place on Twitter was created by pro-Donald Trump and pro-Hillary Clinton **software robots**, or social bots, with the express purpose of distorting the online discussion regarding the elections
 - 4M Tweets (20% of the total)!!

Social election: how social media can bias election

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- The presence of these “bots” can affect the political discussion in three ways
 1. Influence can be redistributed across (suspicious) accounts
 2. The political conversation can become further polarized
 3. Spreading of misinformation and unverified information can be enhanced

- Targeted advertising
 - Facebook lets advertisers exclude users by race



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 - Why?

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 - Why?
 - To test Ads on different segments
 - What do you think about it?

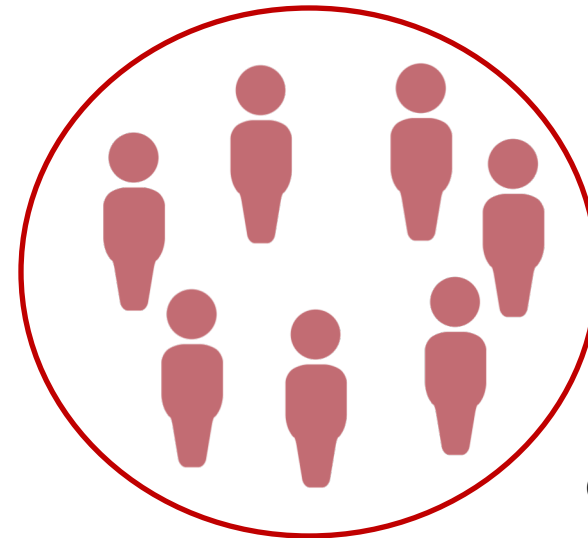
Example: Imagine you are being tasked with selecting bright students from two different ethnicities for an internship

Ethnicity 1 (Minority)



Bright students study
finance

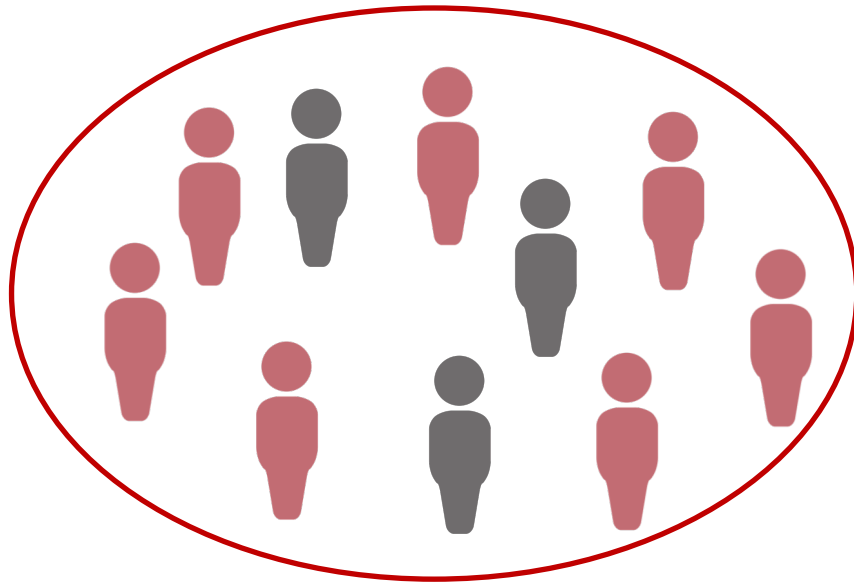
Ethnicity 2 (Majority)



Bright students study
computer science

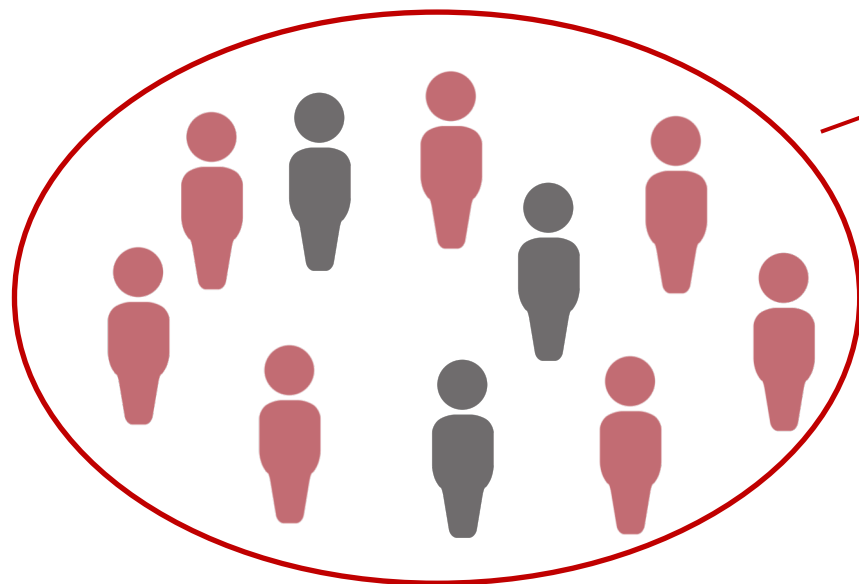
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Suppose you don't have ethnicity info



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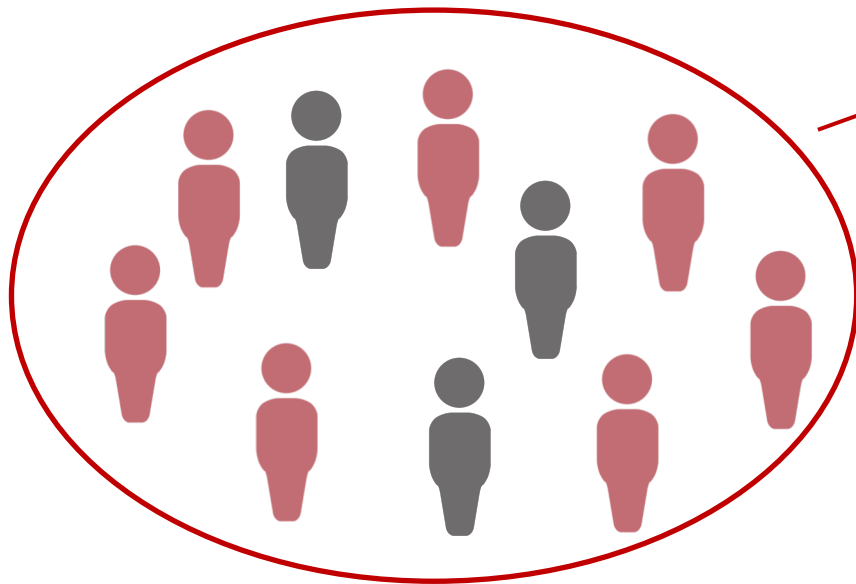
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In aggregate most bright students study computer science

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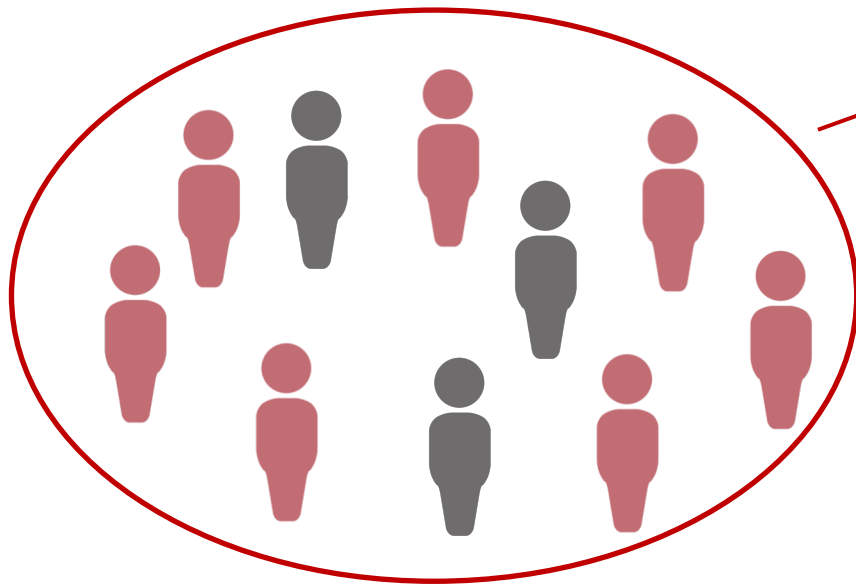


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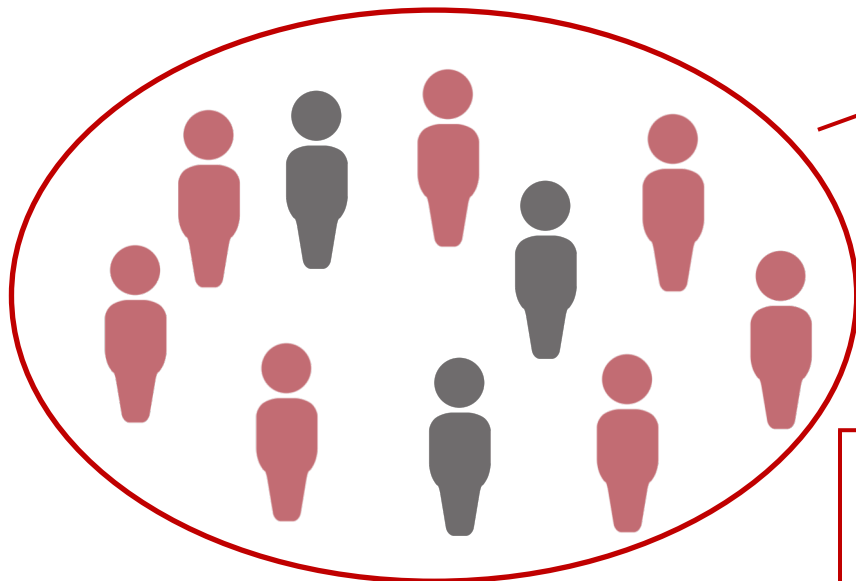
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However, a **fair** algorithm for selecting the best students would then select minority students who majored in finance, and majority group students who majored in computer science.

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Fairness means that similar people are treated similarly

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 - Why?
 - To test Ads on different segments
 - What do you think about it?
 - https://www.wired.com/2016/11/facebooks-race-targeted-ads-arent-racist-think/?mbid=social_twitter