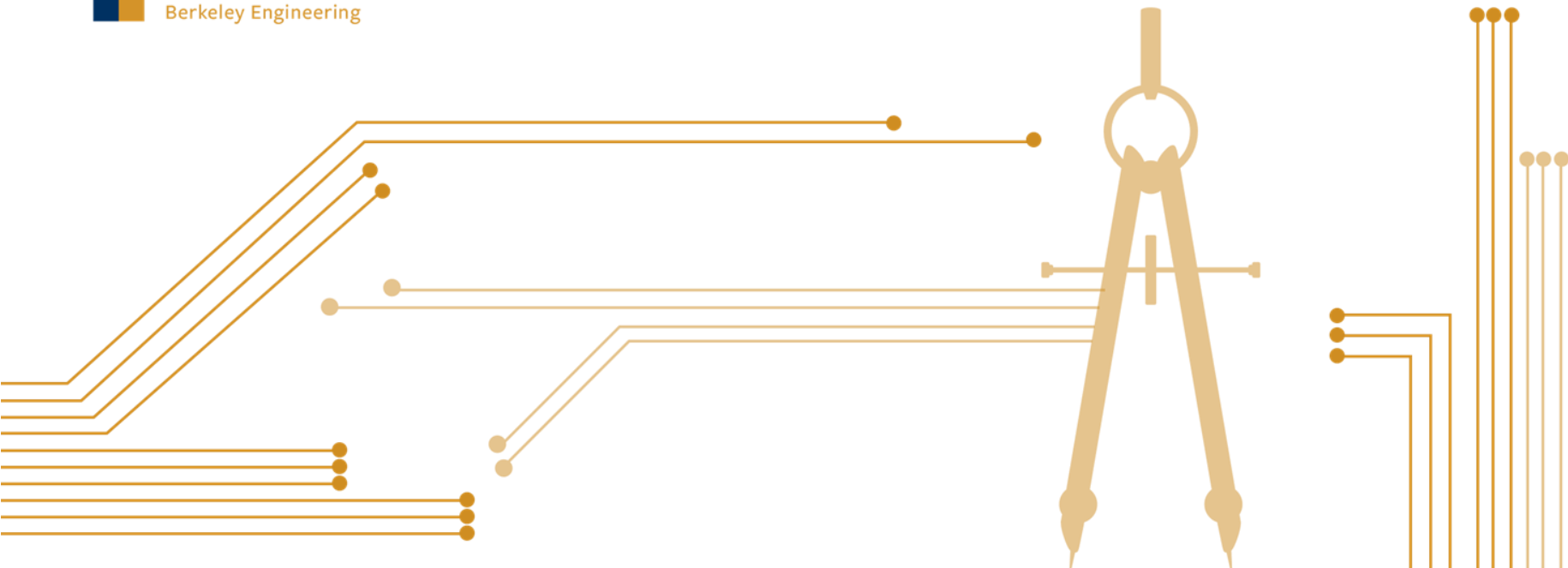




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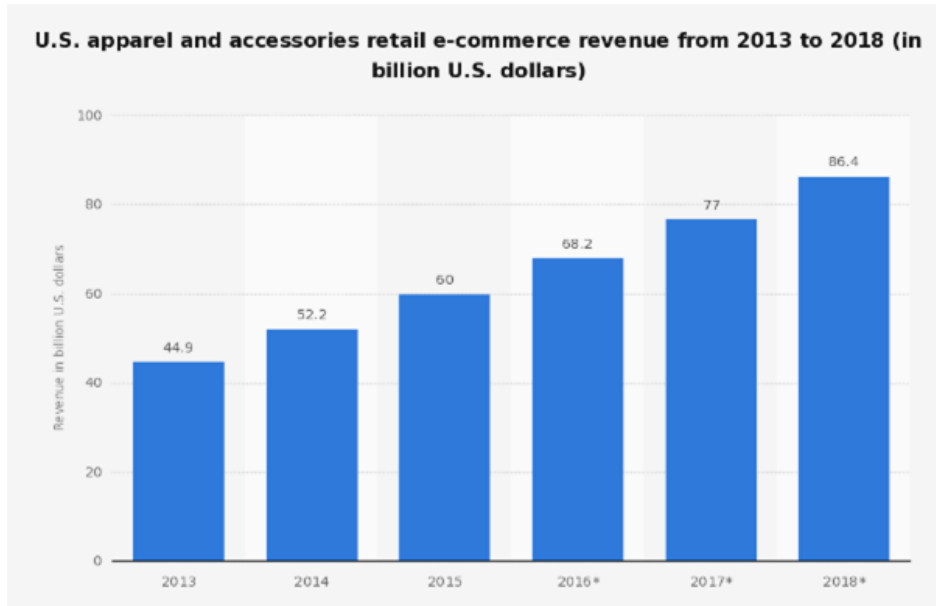
Online Clothes Shopping An Industry Landscape Study Focusing on Returns

Patricio Rivero, Zihan Zhu

This work was created in an open classroom environment as part of a program within the Sutardja Center for Entrepreneurship & Technology and led by Prof. Ikhtlaq Sidhu at UC Berkeley. There should be no proprietary information contained in this paper. No information contained in this paper is intended to affect or influence public relations with any firm affiliated with any of the authors. The views represented are those of the authors alone and do not reflect those of the University of California Berkeley.

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What's Going on in the Market?



Online apparels and accessories revenue is projected to be **86.4 Billion USD** by 2018.

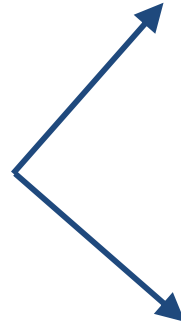
Return rate of 20-30% of apparel orders.

70% of returns are fit-related.

Each return costs \$3-12 to handle.



How are
People
Dealing
with
Returns
?



Improving the Virtual
Fitting Experience

Capitalizing
on Returns

Virtual Fitting: Model-Based

- A precise 2D or 3D model of each customer is generated.
- Main technologies: scanning booth, estimated body measurements, pictures + virtual reality.
- **Meality** (booths in Bloomingdales), **Metail**, **Zugara**.



HOWEVER

- Investment risks are high.
- People don't really want to see what they look like.
- The scanner serves as an example of "the overreach of technology."



Virtual Fitting: Big Data

- Each Customer has an account detailing their body measurements.
- Adds-on appear on retailer websites, giving size suggestions.
- Companies collect huge amount of data.
- Currently on many US retailer websites.
- Companies: TrueFit, Virtusize, Fits.me, Bodi.me, etc.

Companies	Sizing Reference
L.L.Bean	size chart
Nordstrom	True Fit
ASOS	size chart
Victoria's Secret	size chart
Gap Inc. Direct	size chart
Bloomingdale's	size predictor
Barneys	size chart
JCPenney	size chart
Tory Burch	size chart
Kate Spade	True Fit
Michael Kors	size chart
Sears	size chart
Saks Fifth Avenue	size chart
Bergdorf Goodman	size chart
Macy's	True Fit

What Do Women Think?

“Size charts are way too basic”

“Too much trouble to input measurements”

“It really depends on body type, it’s very personal”

“Size is not the only thing that matters, cut and texture are very important”

“I go to the store and try on clothes to know my size, then I shop online”



What About the Kids?

“It’s very easy to shop for baby clothes, sizes are standard no matter the brand.”

“A mom always knows what size their kids are”



“Kids are Ok with any clothes on, they are kids.”

Social Aspect

“I usually look at the comment area below the clothes”.

“If I don’t know my size, I read reviews or post a question on the discussion board”.

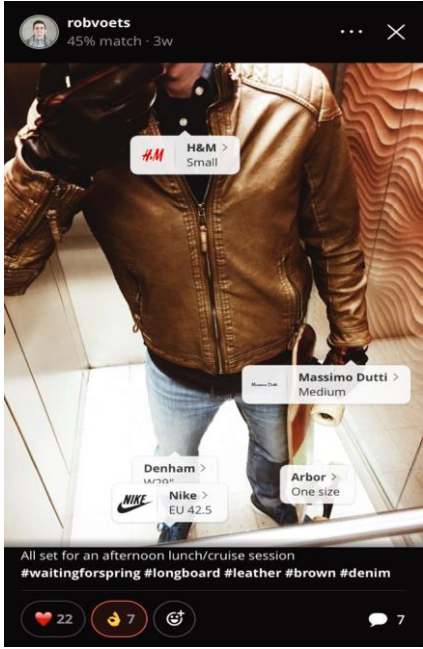
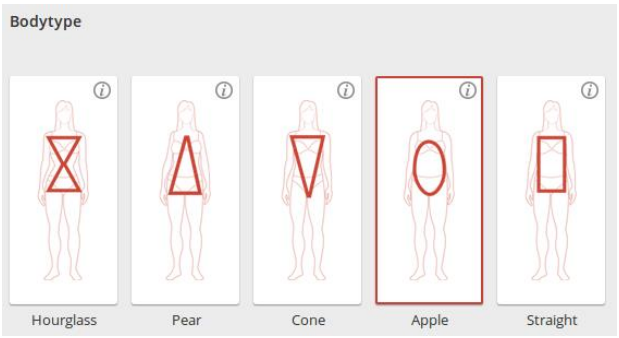


Most women trust what other women have to say about clothes.

Social Aspect



“Discover clothes that fit”

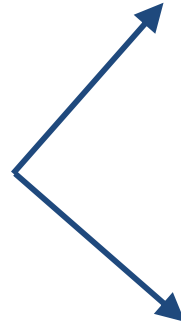


Virtual Fitting Industry Future: Interview Insights

- Augmented Reality (AR) development - Holo Lens by Microsoft.
- Big data - get to know the customer, and the ones like them.
- Social shopping - make home shopping a social thing. AR sharing.



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Capitalize on Returns

Keep what you want, return the rest.



Capitalize on Returns - Clothes Rental

gwynnie bee.
sizes 10-32

GET A FREE TRIAL ▶



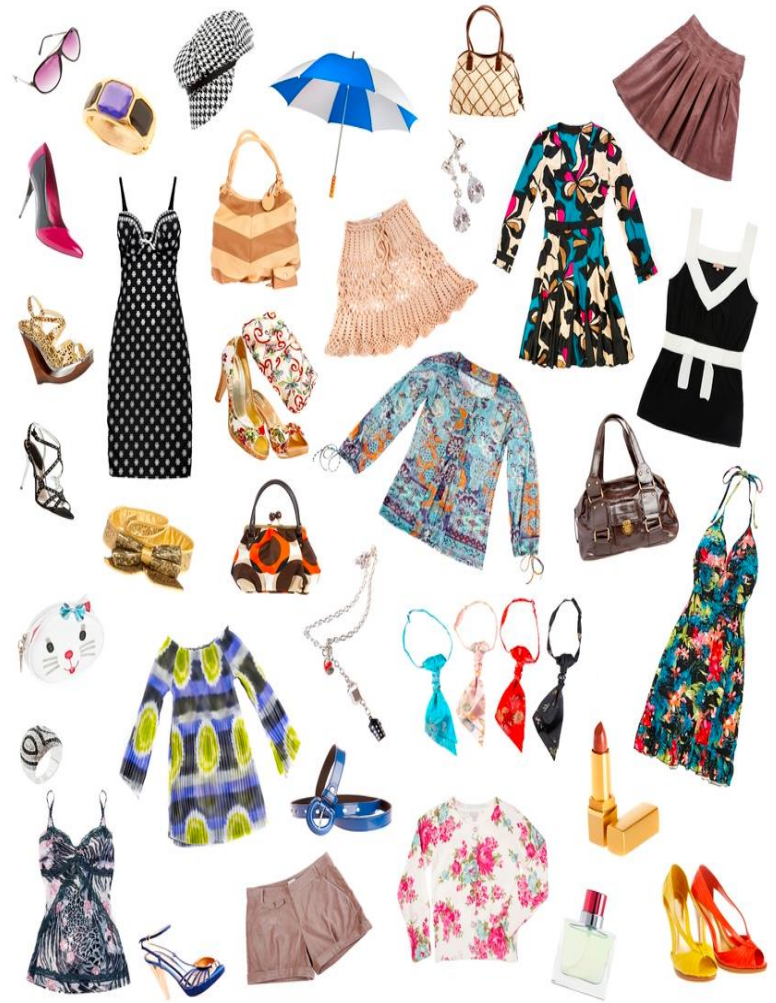
CLOTHES SWAP



SWAPDOM
Circle Swaps, Square Deals.



POSHMARK



Conclusion

- Where the industry is headed:
 - Technology improvements → higher trust
 - Customized service for fragmented industry
 - Social aspect included in experience
 - Big data

Virtual Fitting

Technical factors to consider, social factors, children and baby.

Companies in the Social Aspect

Social aspect of clothing, communicate with friends, suggestions on styles, etc

Intro to Clothes Online Shopping

What has changed, evolution of industry. Online shopping numbers, \$\$.

What are the problems: high return rate.. mainly due to fitting.

Current Technologies

	Meality (Bloomingdales)	Metail	Bodi.me	Fits.me	TrueFit
How it works	Customer gets into scan booth, and 200k body dimensional data points are collected. A profile is created and garment suggestions are displayed to customer. Not in business anymore.	The user uploads a couple of pictures, and software creates 3d model. The user goes to retailer's website and tries clothes on own model. Metail takes the pictures of the clothes of the retailers.	The user has three options to provide measurements: enter self-measured dimensions, through the compute measurement system, and scanning body at scan booth. Tells you what size to pick.	Thorough analysis of body types, physical proportions and preferences of 5+ million shoppers and the technical composition of thousands of garments to match the right clothes to the shoppers. Clients input measurements and avatar is created to try on clothes.	The user inputs size and brand of owned garment, height, age, etc. TrueFit has a huge database and looks for compatibility with garment, and suggests size.

Other frictions

High return rate, women use before returning →
alternative business models: rental, switching, etc.

Original Outline:

1. Intro, venture idea.
2. Primary research: market size, what are the problems?
3. List of main problems: returns! Fit related issues and user experience
4. Research on current companies trying to solve the fitting problem. Their technologies and business models.
5. Reviews and found that initial venture idea was not viable.
6. Interviews: Social aspects of online shopping, companies.
7. More research to look into return problem: capitalize on returns.
8. Alternative business models and industry trend.
9. Where the industry is headed: big data, personalized service, social online shopping and tech improvements for higher fidelity.

Outline From class PDF:

Observation of a change and a hypothesis of what effect it will have in the industry. • Existing Market, map relevant firms in the industry / space • The technical factors or technology changes • Any regulatory or societal factors to consider • Of the existing firms in the area, who will win and lose, and why. Indicate new opportunities.