HOW TO USE 3D BODY IMAGING TO INNOVATE IN THE APPAREL OR FOOTWEAR INDUSTRY

Jon Cilley
Chief Evangelist
Agenda

• Defining the Ghost Economy
• 2016 Apparel & Footwear Retail Survey
• Recommendations
• Questions
About

Jon Cilley
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4 years head of Carbon Black product marketing & competitive intelligence
4 years government public relations officer & spokesperson

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$1.2 Trillion
global fashion and apparel industry

$250 Billion
annual spend on apparel and footwear
Within this industry there are hidden costs and challenges
The “Ghost Economy”
Largely unseen costs by retailers

1. Overstocks
$634.1B

2. Out of Stocks
$471.9B

3. Returns
$642.3B

— IHL GROUP
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The “Ghost Economy”

Largely unseen costs by retailers

- Out-of-Stocks: $634.1B
- Overstocks: $471.9B
- Returns: $642.3B

• 49% of Ghost Economy in US
• $62B returned due incorrect fit in 2015

—IHL GROUP
The “Ghost Economy”

Largely unseen costs by retailers

Returns

- Online penetration only 10%
- Returns are a huge issue online

Returns Due to Wrong Size

- IHL GROUP
The Catch-22 of Free Online Returns

Free Returns = Higher Conversions

49% of Retailers Now Offer Free Online Returns
The Catch-22 of Free Online Returns

Free Returns = Higher Conversions

Higher Conversions = More Returns

49% of Retailers Now Offer Free Online Returns

“Unfortunately it’s the cost of doing business in the e-commerce world.”
— Gordon Glazer, a Shipware consultant (via WSJ)
So What Do We Do About This?
From April 6 – 14, 2016, Body Labs conducted a nationally-representative survey of 1,130 respondents regarding their retail purchasing behaviors. Survey participants ranged across all adult age groups, genders, U.S. regions, ethnicities and household incomes. The results have a +/- 3 percent margin of error.
Shopping Preference

32% shop for clothing at least once a month
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59% prefer shopping in store compared to online
Reason for Preference?
Reason for Preference?

76% try on clothing before purchasing
91% try on footwear
However...

46% “hate” trying on clothing in a fitting room
What Does This Mean?
People ultimately understand the value, but typically hate the process itself.
23% of all clothing purchases get returned
Main Culprit?

64% say poor fit

What is Your Biggest Reason For Returning Clothing or Footwear?

- Poor fit: 64% Apparel, 57% Footwear
- Poor quality: 10% Apparel, 10% Footwear
- Did not like style: 3% Apparel, 4% Footwear
- Changed mind: 13% Apparel, 12% Footwear
- Other (please specify): 9% Apparel, 17% Footwear
A third of consumers are dissatisfied with the fit of traditional sizes
And...

57% of consumers only purchase apparel or footwear online from brands or styles they know will fit.
Why?
Brands try to fit 7 billion people into fewer than 10 (female/male) sizes
They also still use traditional methods to approximate size and shape
Still using singular fit models and linear grading rules for different sizes
The Benefits and Challenges of Tech Packs
Reasoning for Constrained Sizes

Missing essential customer data and manufacturing is still labor intensive and costly.
Recap So Far...

1. Ghost Economy is a major problem
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2. Returns are a huge factor
Recap So Far...

1. Ghost Economy is a major problem
2. Returns are a huge factor
3. Fit is a major component of high return rates
So What’s the Solution?
3 Steps for Success
3 Steps for Success

1. Efficiently capture, store and analyze your customers’ body shape and measurements at scale
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2. Seamlessly correlate captured customer shape or measurement data with technical clothing designs
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2. Seamlessly correlate captured customer shape or measurement data with technical clothing designs
3. Validate customer preference with external virtual try-on features in-store or online
1

Efficiently capture, store and analyze your customers’ body shape and measurements at scale
Laser Scanners

**Pro:** Highly accurate

**Con:** Expensive deployment, user adoption not likely and immobile
Depth Sensors

**Pro:** Highly mobile, accurate, inexpensive (compared to laser scanning) and seeing consumer adoption

**Con:** Lower quality than laser scans and user adoption still early
Challenges with Laser Scanners or Depth Sensors
Challenges with Laser Scanners or Depth Sensors

- Rigid and Cannot Be Reposed
- “Hole Filling” Approaches Join Data Incorrectly
- Data Missed by Scanner/Sensor
Measurements

**Pro:** Very inexpensive and scalable

**Con:** Prone to human error
Challenges with Measurements

Consumers won’t accurately take needed measurements of themselves at scale

High probability to be taken from inconsistent locations
With All 3 Solutions, You Still Need a Way to Process the Data
At Body Labs, we take the RAW data from scanners, depth sensors or measurements and process it into a MODEL the computer can understand.
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“Hole Filling” Approaches Join Data Incorrectly

Data Missed by Scanner/Sensor

Rigid and Cannot Be Reposed

Remember all those anomalies with the scanner, depth sensor or measurements?
Rigid and cannot be reposed

"Hole Filling" approaches join data incorrectly

Data missed by scanner/sensor

They’re gone with a body model
This approach has delivered sub-centimeter accuracy.

We Can Also Use the Same Approach Using Basic Known Measurements (No Scans Required)
2

Seamlessly correlate captured customer shape or measurement data with technical clothing designs
Extract Measurements from Body Model of Customer
Extract Measurements from Body Model of Customer

Correlate Measurements from Body Model with Measurements in Tech Pack
Extract Measurements from Body Model of Customer

Correlate Measurements from Body Model with Measurements in Tech Pack

Recommend Size or Develop Custom Clothing
Hidden Benefits of Collecting Your Customers’ Body Shape and Measurements at Scale
Inform Design

Everyone Who Purchased SMALLS

Average SMALL

Design in 3D CAD Program

Everyone Who Purchased LARGES

Average LARGE
3

Validate customer preference with external virtual try-on features in-store or online
Validate with Virtual Try-On

Preference is More than Just Fit
If You Solved Fit Issues

85% would purchase more during a single transaction

58% would purchase more frequently
Recap: 3 Steps for Success

1. Efficiently capture, store and analyze your customers’ body shape and measurements at scale
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Thank You

Questions?

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2016 Apparel & Footwear Retail Survey Report Link:
bodylabs.com/resources/white-papers/2016-apparel-footwear-retail-survey-report/

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