

# HYPOTHESIS DRIVEN DEVELOPMENT

USING DATA THE RIGHT WAY

# WHO ARE WE?



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Software Engineers at  **REDBUBBLE**

# WHAT IS A REDBUBBLE?







[Men's](#)
[Women's](#)
[Kids](#)
[Cases & Skins](#)
[Stickers](#)
[Wall Art](#)
[Home Decor](#)
[Stationery](#)
[Bags](#)
[Lookbook](#)

BUY SHINY INDEPENDENT DESIGNS ON SUPER-GREAT PRODUCTS

### Shop

Mens

Womens

Kids

Cases & Skins

Stickers

Wall Art

Home Decor

Stationery

Bags

Gift Certificates

### Category

Animal

Music

Science

Sport

### Join RB

About Redbubble



Talking Art in Motion  
with Dancer Sarah 'Smac'  
McCreanor



\$15.5 Million is A Lot of  
Money

### Found by RB

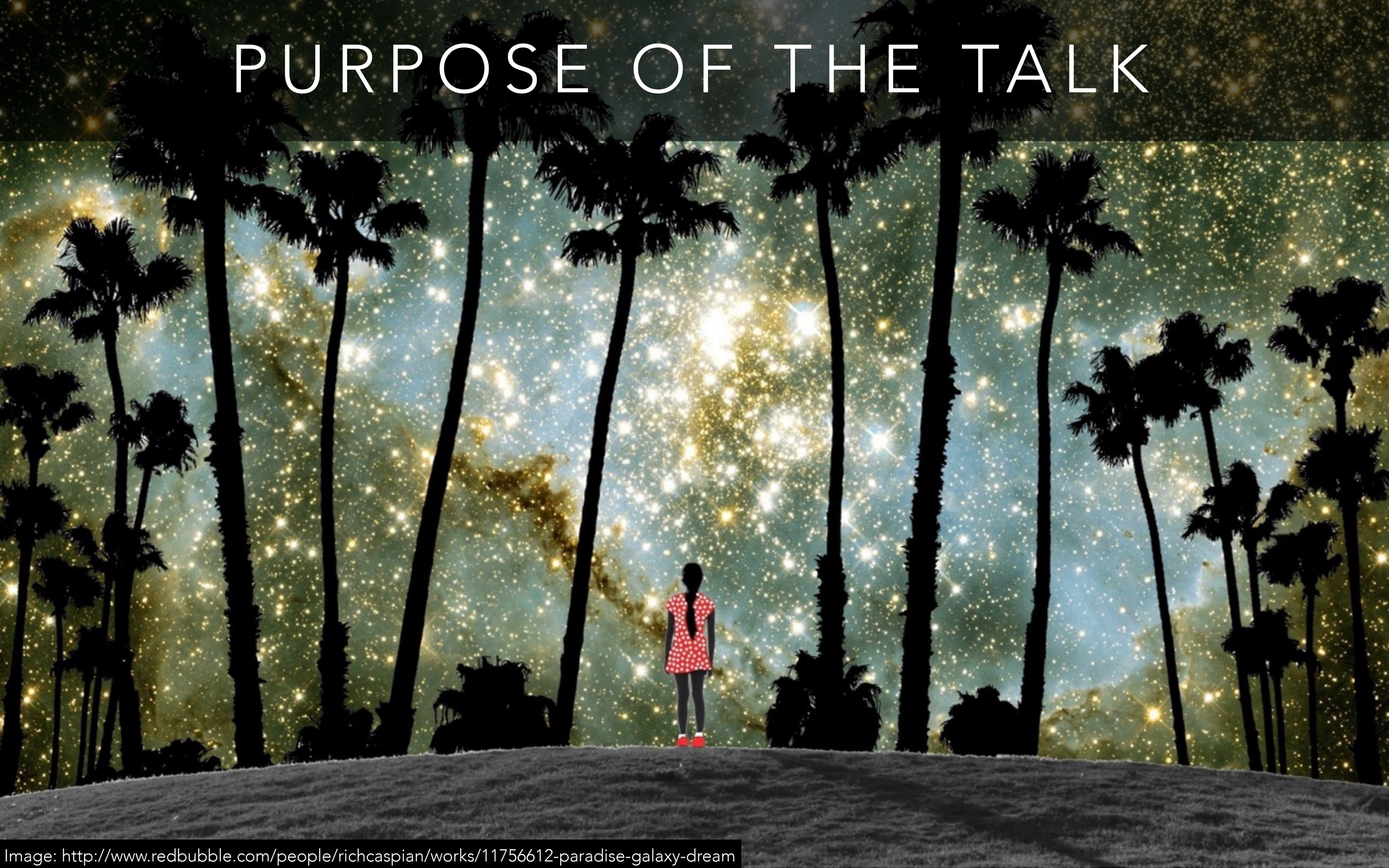


MAY  
26

# WHAT IS REDBUBBLE?

- An online marketplace for independent artists
- Over 80,000 selling artists
- Paid over \$10M to artists in 2014 alone!
- **WE'RE HIRING!**

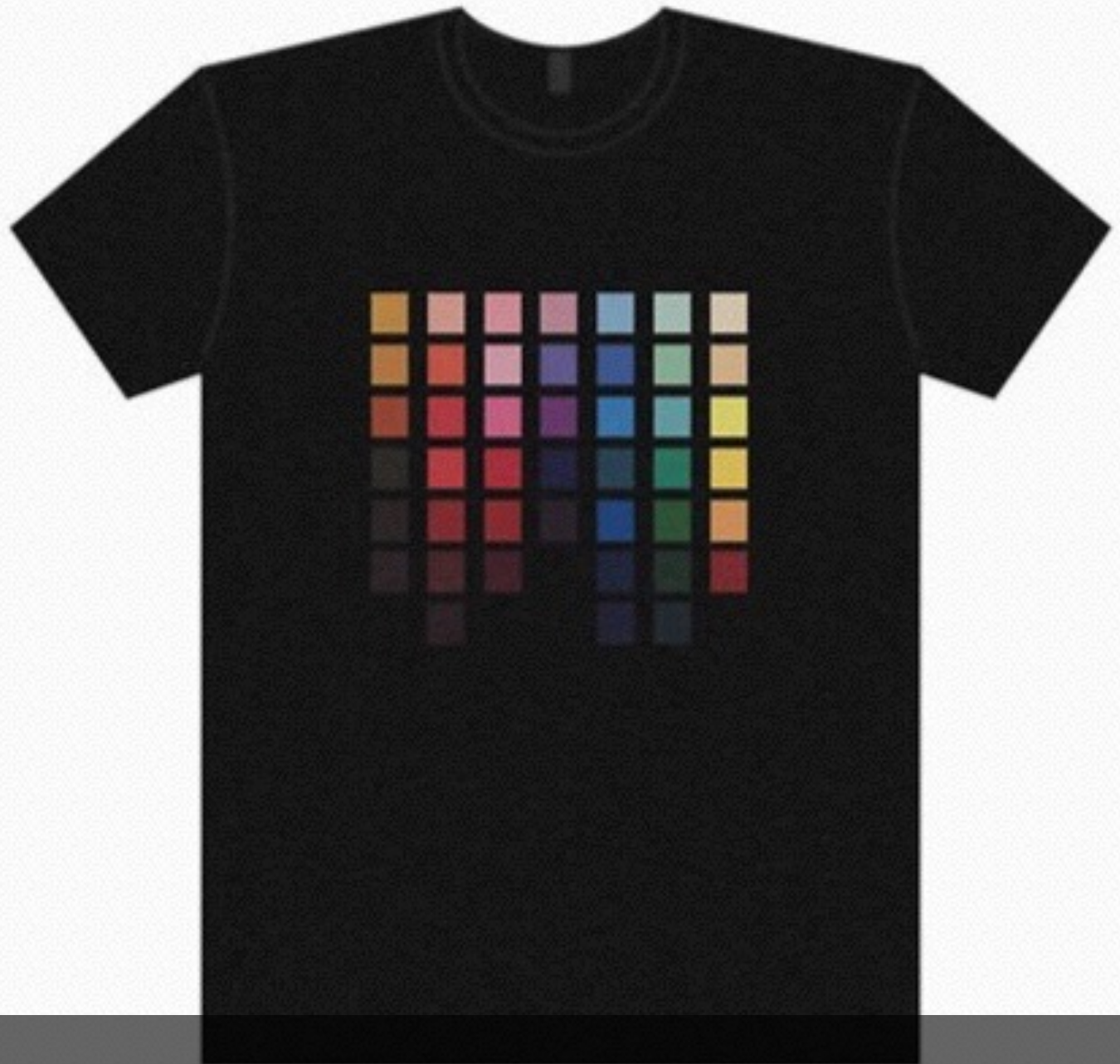
# PURPOSE OF THE TALK



# THE PAST



>> 711 C T-Shirt



Artist: [onetonshadow](#) - NOT THE MINISTER OF TEES  
[browse t-shirts](#) [next](#) ▶

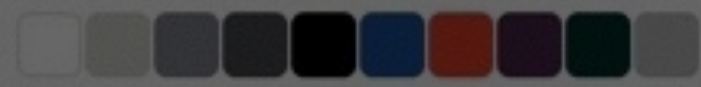
 [buy / preview](#)

T-Shirt: \$25.94  
[change currency](#)

I've had these colour swatches sitting on my desk for 6 months, while I consider which colours to add to the RedBubble range, then I thought, I'll put them on a tee. So I did.

Available for sale as T-Shirts, Kids Clothes and Stickers

# T-SHIRT PREVIEWS





>> 711 C T-Shirt



Artist: [onetonshadow](#) - NOT THE MINISTER OF TEES  
[browse t-shirts](#) [next](#) ›

[buy / preview](#)

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Favorite [Report Concern](#) [Share This](#)

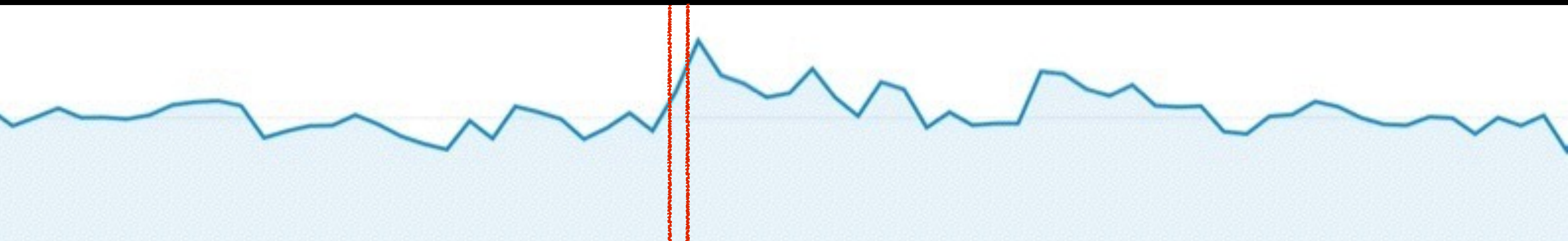


[jumpy](#)  
looks cool!!

# T-SHIRT PREVIEW

# T-SHIRT PREVIEWS

Ecommerce Conversion Rate




10,000 Gift Vouchers  
for members

Release of new T-Shirt previews

**Exhibit your Art, Design & Photography for free on RedBubble**

It takes just a few minutes to get started — [find out more](#) or [join RedBubble](#) now!

[Join RedBubble Now](#) 

**T-Shirts**

Where art meets cotton >>



**Wall Art**

Buy artwork for your wall >>



**Calendars**

A whole year of art >>



**Greeting Cards**

The best quality greeting cards ever >>



**Sell your art**  
Sell your work to a global audience >>

# NEW HOME PAGE

**Creative Writing**  
Poems, short stories  
Read and share

**New to Redbubble?**  
Take the tour





**EXHIBIT, BE INSPIRED & SELL**

You've found a new home for your Art, Design, Writing & Photography.

[SIGN UP NOW](#)

[TELL ME MORE](#)

Liberté, égalité, fraternité



**NEW HOMEPAGE**



[Browse T-Shirts & Design »](#)

[Browse Cards, Art Prints & Photography »](#)



### Don't Forget to Blink



#### Buy T-Shirts

Guys Tees, Girls Tees, Hoodies, Kids T-Shirts and Baby Clothes



#### Buy Wall Art

Framed Art, Posters, Greeting Cards, Calendars, Canvas Prints and more...



REDBUBBLE

Search...



Shop ▾

Sign In

BUY SHINY INDEPENDENT DESIGNS ON SUPER-GREAT PRODUCTS

Shop

T-Shirts & Hoodies

Stickers

iPhone & iPod Cases

Prints

Posters

Cards

Kids Clothes

Calendars

Gift Certificates

Join RB

About Redbubble

Sign Up Now



30 Spooky Artworks for Friday the 13th

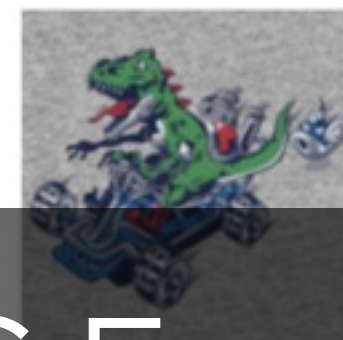
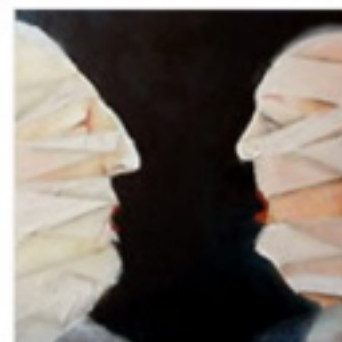
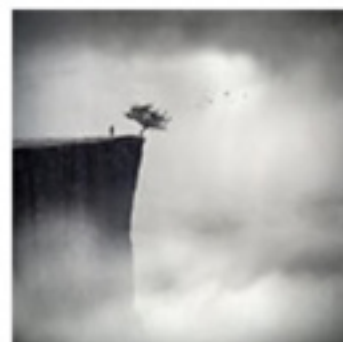
26 Comments



Featured Artist: Helena Babic

43 Comments

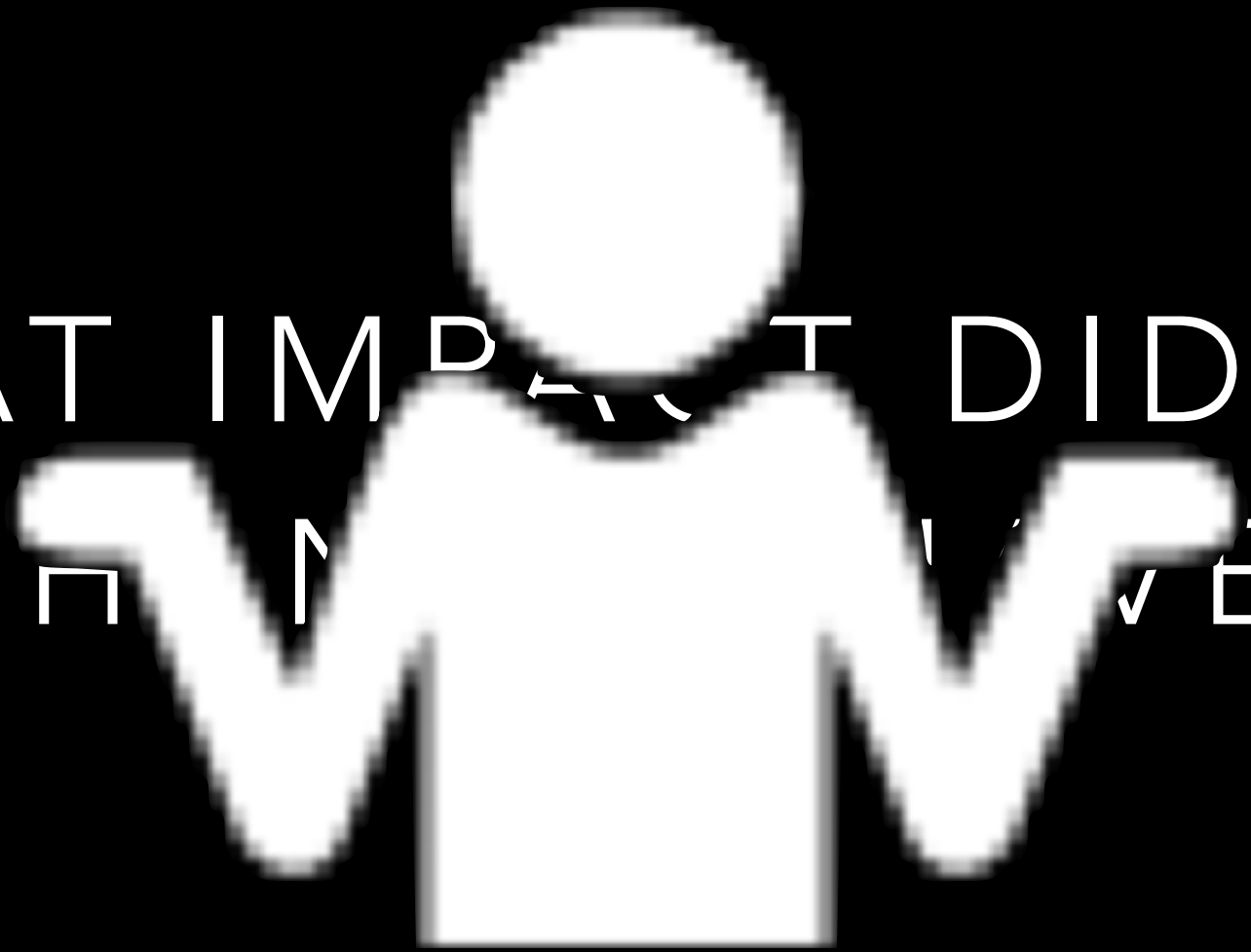
Found by RB



JUL 14

NEW HOMEPAGE

WHAT IMPACT DID THE  
COMPANIES HAVE?





Get out of the building

Build-Measure-Learn

Minimum Viable Product

Actionable Metrics

Pivot

Validated Learning

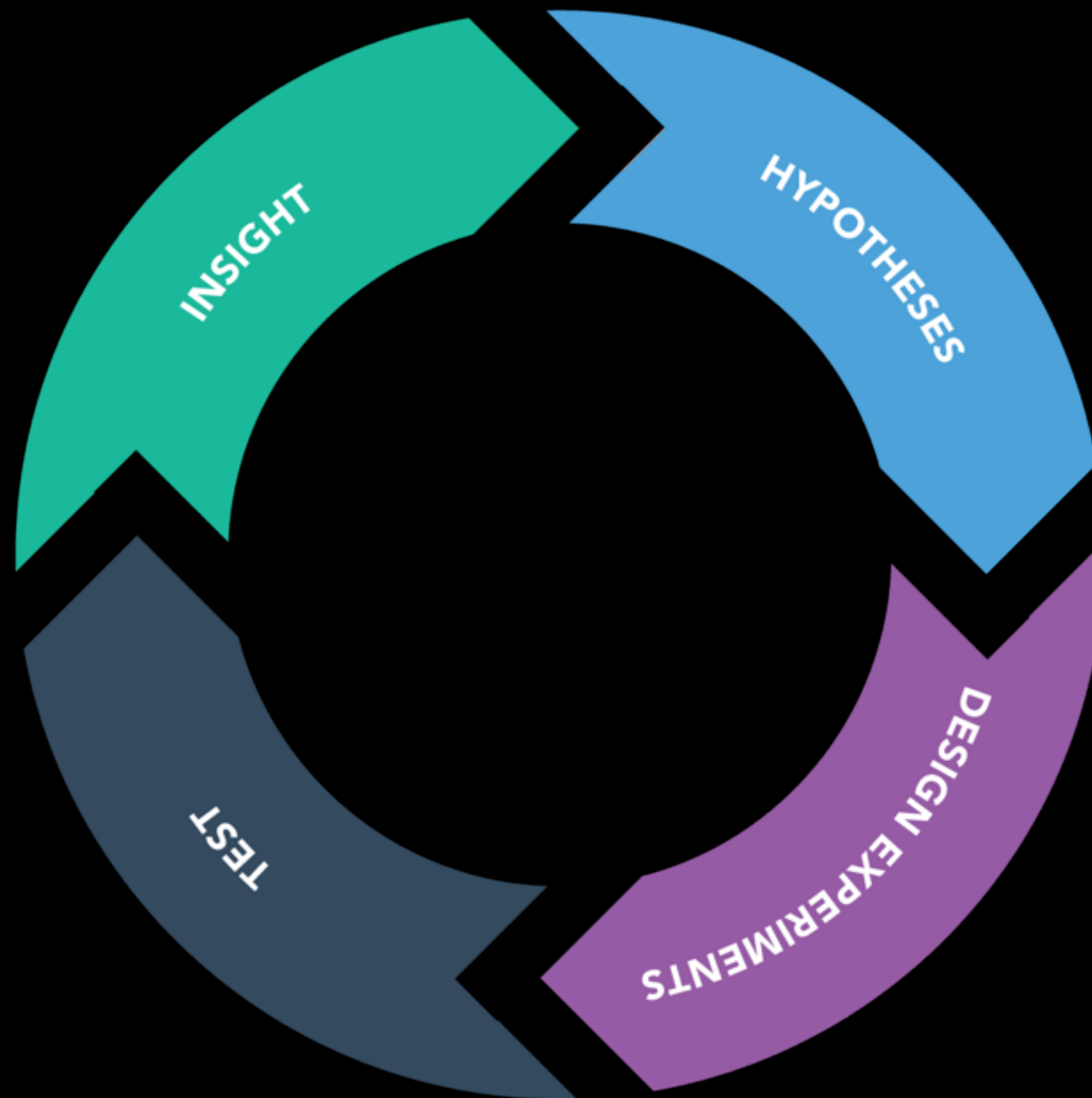


# VALIDATED LEARNING

Validated learning is defined as a process in which one learns by trying out an initial idea and then measuring it to validate the effect.

Each test of an idea is a single iteration in a larger process of many iterations whereby something is learnt and then applied to succeeding tests.

# VALIDATED LEARNING





# CASE STUDIES



FREE SHIPPING

# HYPOTHESIS

If there are no shipping costs to potential buyers,  
they will be more likely to transact.

FREE STANDARD SHIPPING ON ALL U.S.A. ORDERS



Search...

PEGASI DESIGNS > PORTFOLIO > SURVEY CORPS. EMBLEM



STYLE:

T-Shirt

S

M

L

XL

2XL

3XL

We Use American Apparel

[Sizing Chart](#)

Front

OR

Back

**\$23.93**

Free Shipping to U.S.A.

x

1

ADD TO CART



T-Shirts & Hoodies Info

Available to buy on...

FREE STANDARD SHIPPING ON ALL U.S.A. ORDERS



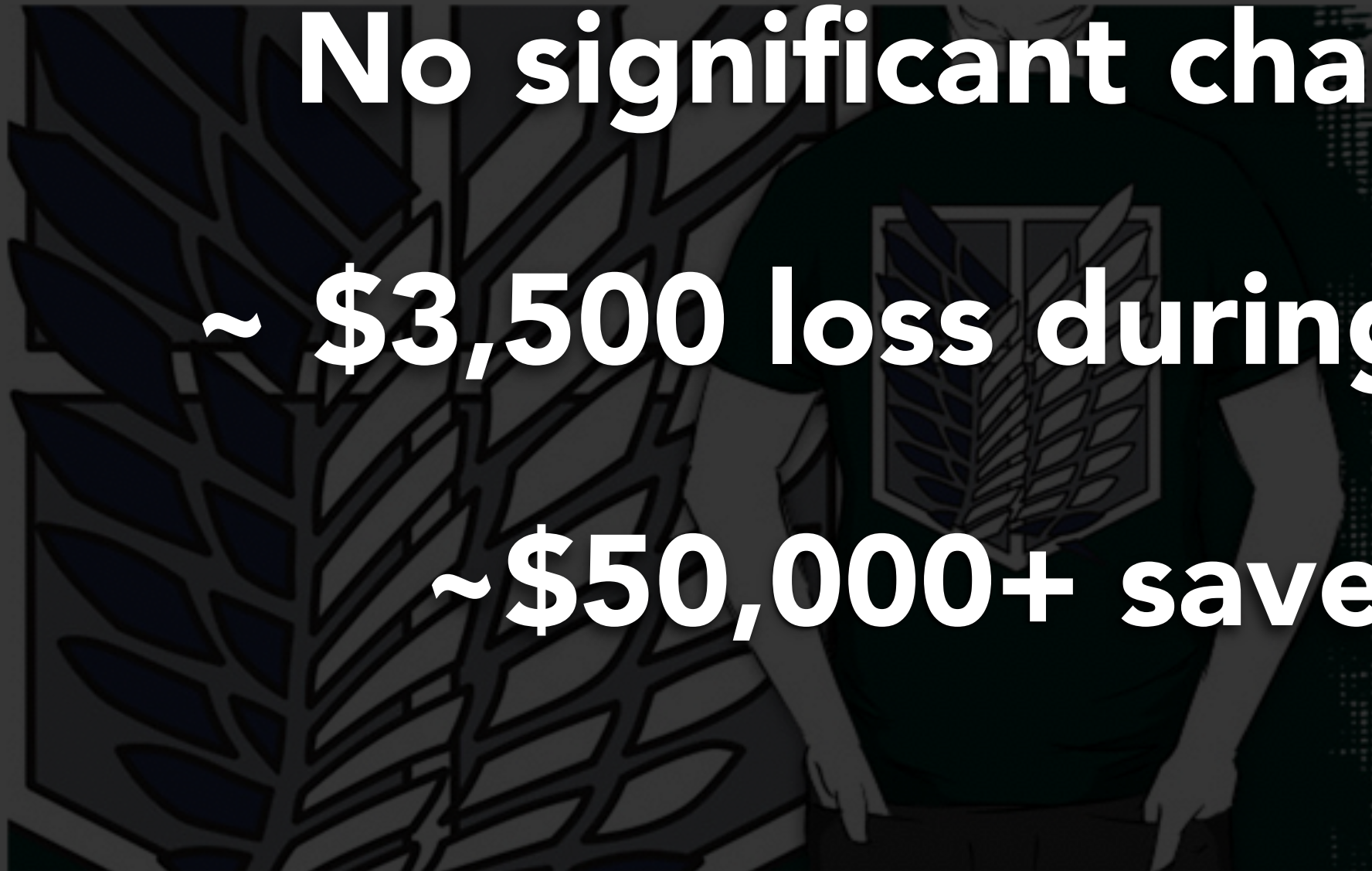
Search...

PEGASI DESIGNS > PORTFOLIO > SURVEY CORPS. EMBLEM

**No significant change**

**~ \$3,500 loss during test**

**~\$50,000+ saved**



Color selection grid with a checkmark on the bottom-left color.

STYLE:  
T-Shirt

L XL 2XL 3XL

We Use American Apparel [Sizing Chart](#)

Front OR Back

**\$23.93**

Free Shipping to U.S.A.

x 1 **ADD TO CART**

*T-Shirts & Hoodies Info*

Available to buy on...

# LEARNINGS

Test ideas that seem obvious.  
It can save you a lot of money.



## Secure Checkout

### Delivery & Shipping

#### Recipient Details

John

Smith

041111111111

#### Shipping Address

123 Long St

Address Line 2 (optional)

Melbourne

VIC

3000

Australia

#### Shipping Method

- Standard (5-15 Business Days)
- Express (3-7 Business Days)
- We don't recommend APO / PO Box addresses
  - [Shipping & Delivery Help](#)

CONTINUE TO BILLING & PAYMENT

### Billing & Payment



OR

#### PAY BY CREDIT CARD

#### Credit Card Details

[Copy Delivery & Shipping](#)

First Name

Last Name

The logos for VISA, MasterCard, and AMEX are displayed in a row.

Credit Card Number

Expires

Security Code

#### Billing Address

Address Line 1

Address Line 2 (optional)

City or Suburb

State, Region or Province

ZIP or Postcode

Country

#### Email Address

email@example.com

- Your receipt will be emailed
- We won't pass your email on to anyone else
- We hate spam too

PLACE ORDER NOW

# FRICITIONLESS PAYMENT SYSTEMS

# HYPOTHESIS

If a convenient payment system is available to potential buyers, they will be more likely to transact.

Therefore we should provide more frictionless payment options.

# FRICITIONLESS PAYMENT SYSTEMS

**Amazon Payments has the biggest user base amongst frictionless payment systems**

- Paypal: 110M active users
- Amazon: 215M active users

## SOURCES:

[HTTPS://WWW.PAYPAL.COM/WEBAPPS/MPP/ENT-ONLINE-ATTRACT-SHOPPERS](https://www.paypal.com/webapps/mpp/ent-online-attract-shoppers)

[HTTP://PHX.CORPORATE-IR.NET/PHOENIX.ZHTML?C=176060&P=IROL-NEWSARTICLE&ID=1862641](http://phx.corporate-ir.net/phoenix.zhtml?c=176060&p=irol-newsarticle&id=1862641)

# DOWNSIDE

Only accepts USD

# FRICITIONLESS PAYMENT SYSTEMS

We've added this  
Sticker to your cart



OR

CHECKOUT NOW

Continue Shopping

View Cart

# FRICITIONLESS PAYMENT SYSTEMS

We've added this  
Sticker to your cart



Check out with **PayPal**  
The safer, easier way to pay

OR

Pay Now   
amazonpayments™

OR

CHECKOUT NOW

Continue Shopping

View Cart

# FRICITIONLESS PAYMENT SYSTEMS

**We've added this  
Sticker to your cart**



The safer, easier way to pay

OR

Amazon Payment is currently  
unavailable

OR

**CHECKOUT NOW**

Continue Shopping

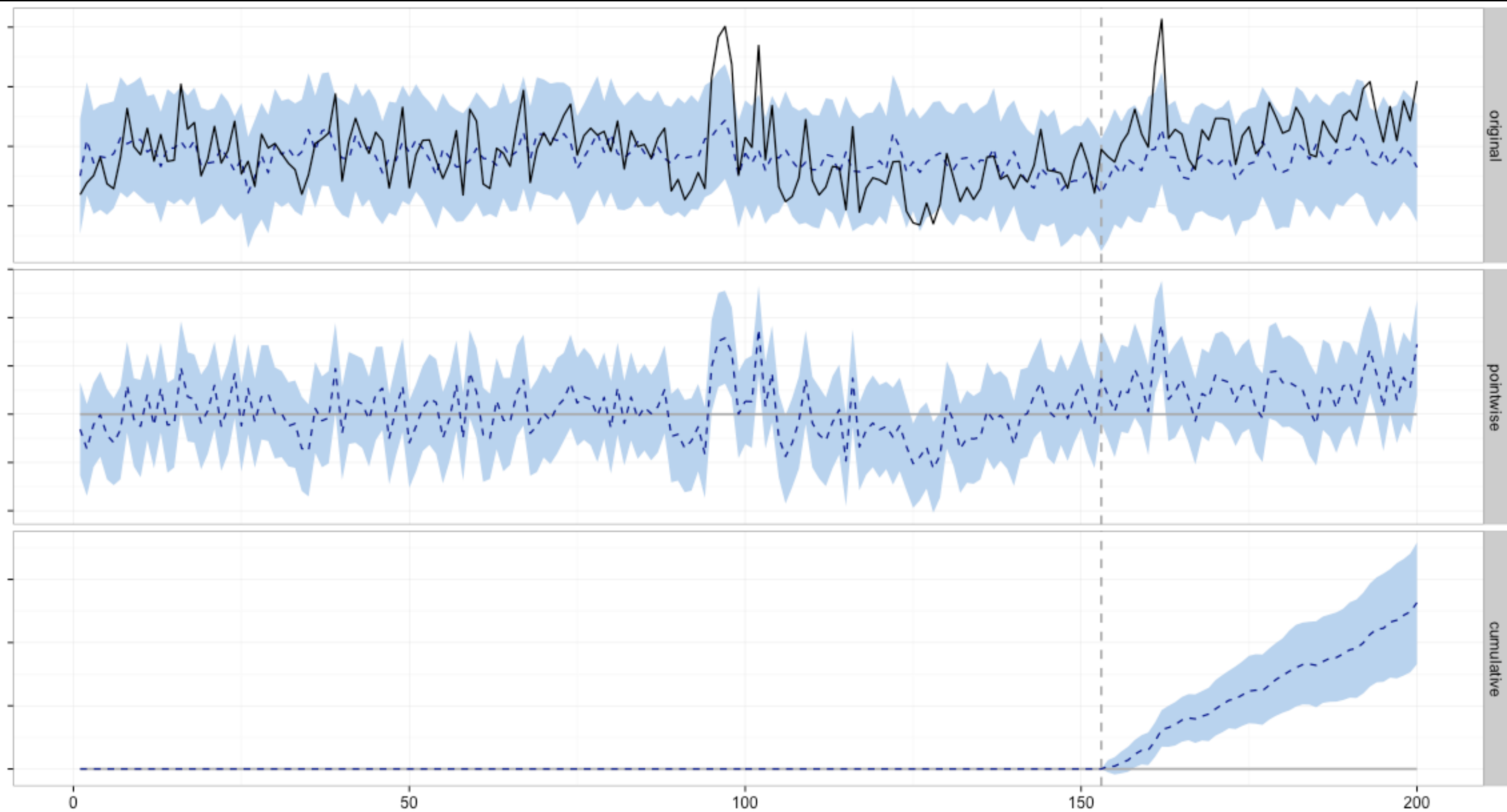
View Cart

# FRICITIONLESS PAYMENT SYSTEMS

- We calculated an 8% increase in eCommerce conversion rate.\*
- Once implemented, we observed a 5% increase in eCommerce conversion rate.



# GOOGLE CAUSAL IMPACT



# LEARNINGS

- Use a fake door experiment to test ideas quickly, but keep the customer experience in mind.
- If possible, validate your feature roll-out.



T-Shirts & Hoodies

CLOTHING STYLE:

Baseball ¾ Sleeve



XS S M L XL

[Sizing Chart](#)

Front OR Back

**\$28.64**

x 1 **ADD TO CART**

[T-Shirts & Hoodies Info](#)

Available to buy on...

# REALISTIC T-SHIRT PREVIEWS

Weird Love

# HYPOTHESIS

Enabling buyers to understand how a clothing product looks/sits/feels through a more detailed, realistic preview would make them more likely to buy.

# REALISTIC T-SHIRT PREVIEWS

Control:



Variant:



# REALISTIC T-SHIRT PREVIEWS

We expected 10% increase of people adding T-Shirts to their cart.

# REALISTIC T-SHIRT PREVIEWS

The image shows a stack of three realistic Twitter tweet previews. The top tweet is from user 'tuchis 2k15' (@legjongsuk) with a 'Follow' button. The middle tweet is from user 'bye bye yo' (@aintitnifty) and contains the text '@kisengard @damianwaynian IS IT BECAUSE SEATTLE???' with a 'Follow' button and a '3 FAVORITES' section. The bottom tweet shows a '1 FAVORITE' section. The tweets are layered and slightly offset to create a sense of depth.



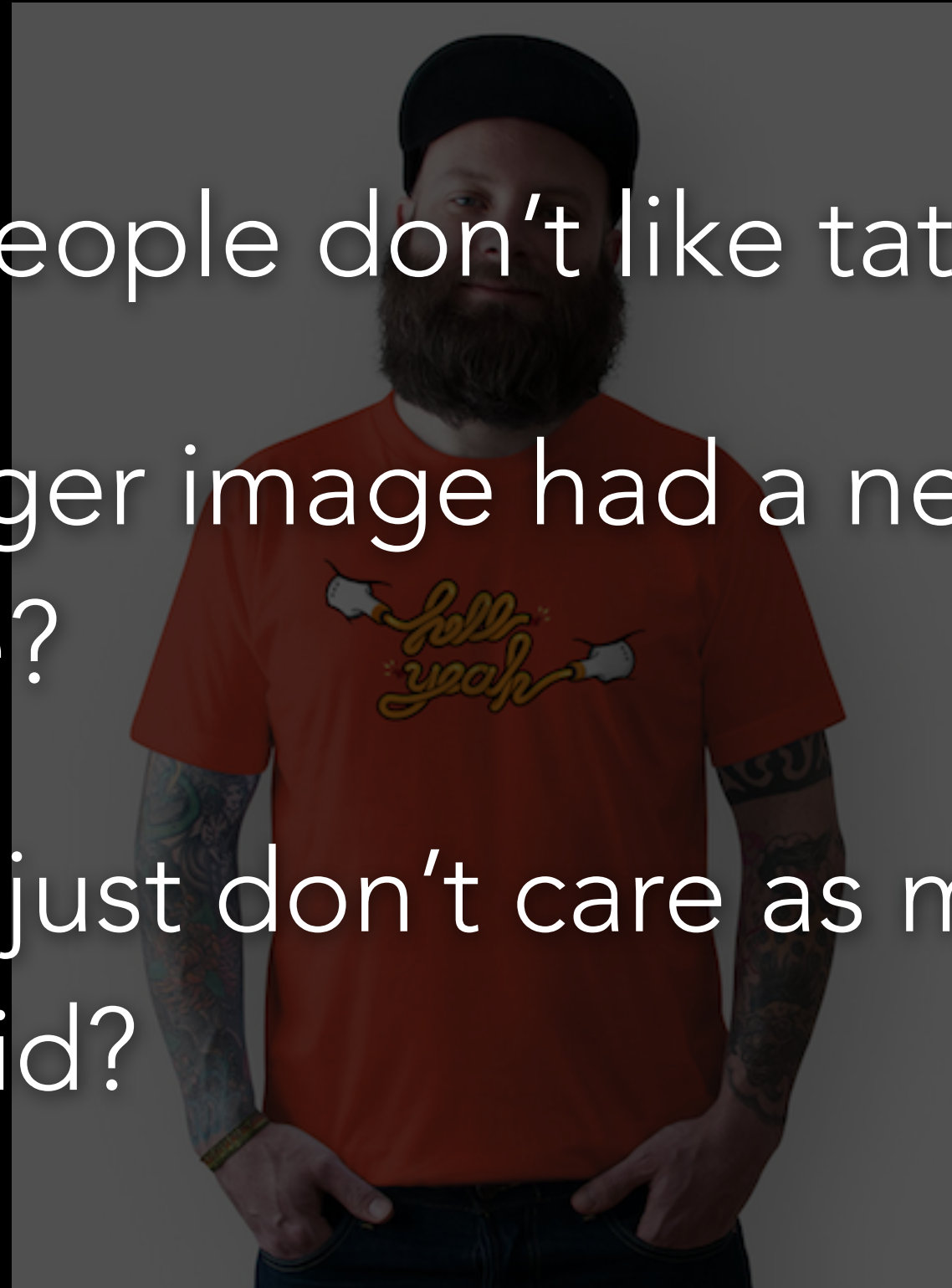
# REALISTIC T-SHIRT PREVIEWS

- We expected 10% increase of people adding T-Shirts to their cart.
- Actually got no significant increase



# WHY?

- Maybe some people don't like tattoos and beards?
- Maybe the bigger image had a negative impact on page load time?
- Maybe people just don't care as much as we thought they did?



# LEARNINGS

- A/B testing can only tell you what happened, not why something happened
- Inform others, especially your Customer Service Team
- You need a vision to know where you're heading



T-Shirts & Hoodies

CLOTHING STYLE:

Baseball ¾ Sleeve



XS S M L XL

[Sizing Chart](#)

Front OR Back

**\$28.64**

x 1 **ADD TO CART**

[T-Shirts & Hoodies Info](#)

Available to buy on...

# PRODUCT PAGES

Weird Love

Like 19

Favorite

Share

Behavioural

Eyetracking

Clickstream Analysis  
A/B Testing

Usability Lab Studies

Ethnographic Field Studies

Unmoderated UX Studies

Concept Testing

Attitudinal

Interviews

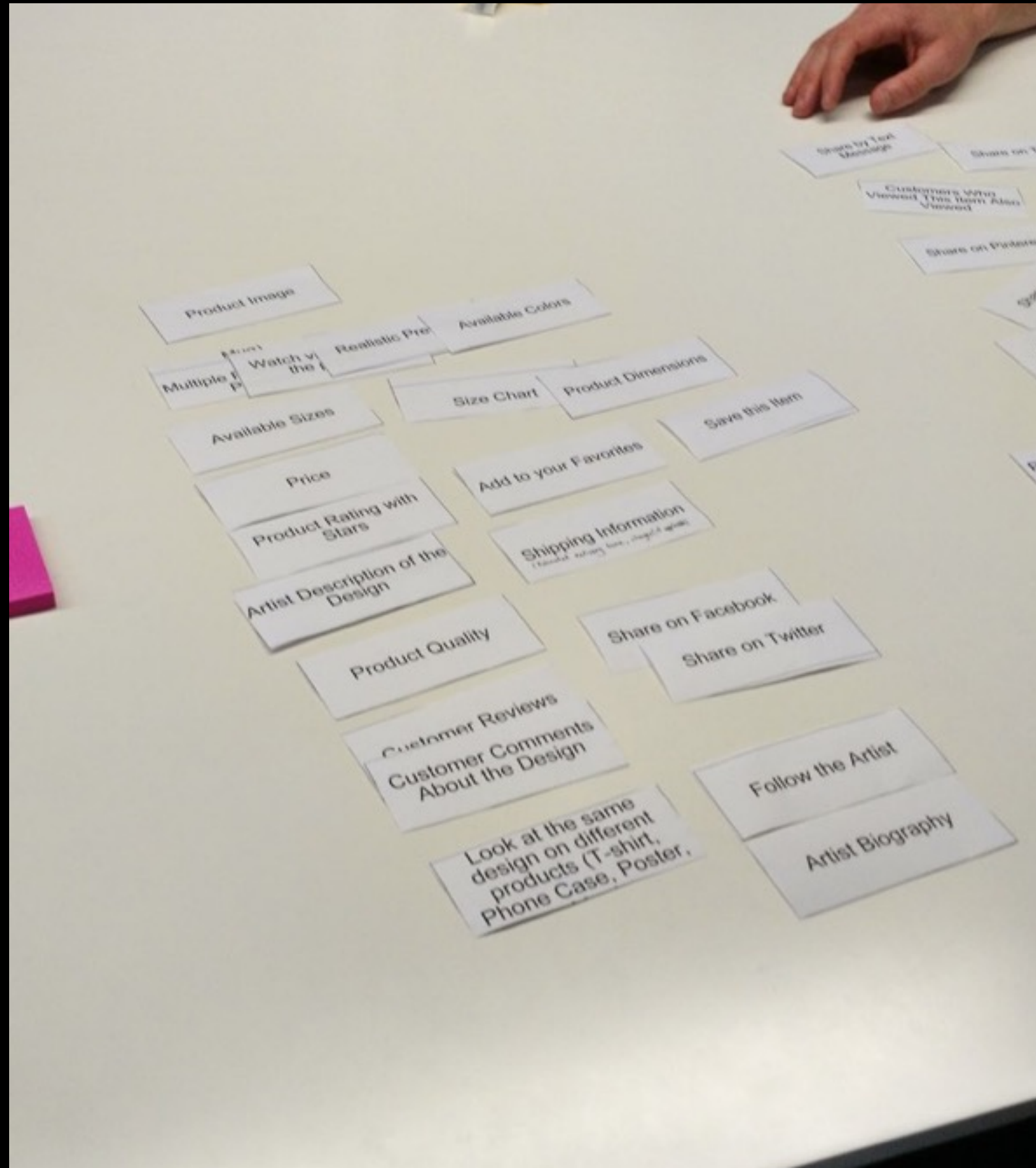
Card Sorting

Surveys

Qualitative (direct)

Quantitative (indirect)

# CARD SORTING



# CARD SORTING

USE IT  
EVERY TIME

PRICE



100%

PRODUCT DESCRIPTION



95%

PRODUCT IMAGE



90%

SHIPPING INFORMATION



80%

PRODUCT RATING WITH STARS

80%

AVAILABLE SIZES



76%

CUSTOMER REVIEWS

68%

# CARD SORTING

USE IT  
EVERY TIME

PRICE



100%

PRODUCT DESCRIPTION



95%

PRODUCT IMAGE



90%

SHIPPING INFORMATION



80%

**PRODUCT RATING WITH STARS**

80%

AVAILABLE SIZES



76%

**CUSTOMER REVIEWS**

68%

# SHIPPING INFORMATION

	USE IT EVERY TIME
PRICE ✓	100%
PRODUCT DESCRIPTION ✓	95%
PRODUCT IMAGE ✓	90%
<b>SHIPPING INFORMATION</b> ✓	80%
PRODUCT RATING WITH STARS	80%
AVAILABLE SIZES ✓	76%
CUSTOMER REVIEWS	68%



# SHIPPING INFORMATION

ers Wall Art Home Decor Stationery Tote Bags Gifts

T-Shirts & Hoodies

CLOTHING STYLE:  
Unisex T-Shirt

S M L XL 2XL 3XL


Front OR Back

**\$26.94**

x 1 **ADD TO CART**

Arrives by **March 24th**  
Standard / [Express shipping to Australia](#)

[i T-Shirts & Hoodies Info](#)



# PRODUCT STAR RATING

USE IT  
EVERY TIME

PRICE



100%

PRODUCT DESCRIPTION



95%

PRODUCT IMAGE



90%

SHIPPING INFORMATION



80%

**PRODUCT RATING WITH STARS**

80%

AVAILABLE SIZES

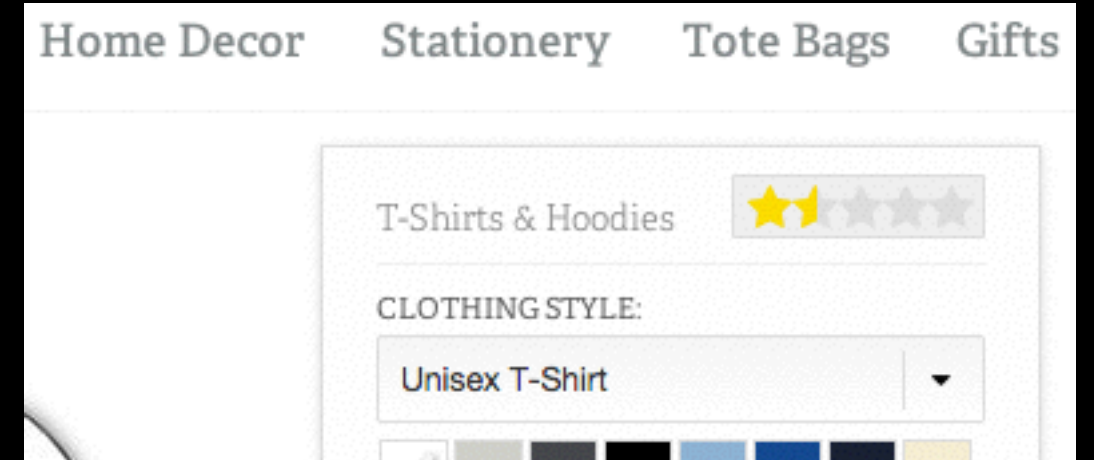
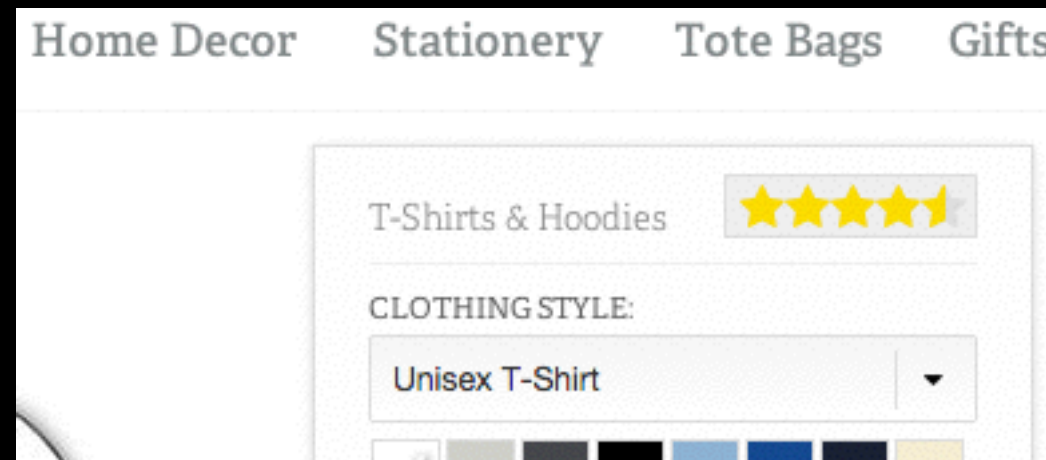
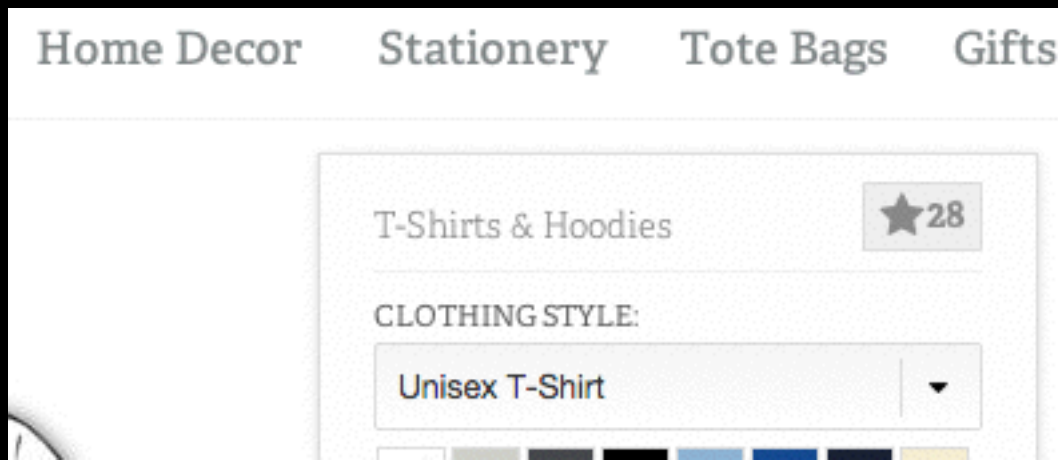


76%

CUSTOMER REVIEWS

68%

# PRODUCT STAR RATINGS



# CUSTOMER REVIEWS

		USE IT EVERY TIME
PRICE	✓	100%
PRODUCT DESCRIPTION	✓	95%
PRODUCT IMAGE	✓	90%
SHIPPING INFORMATION	✓	80%
PRODUCT RATING WITH STARS		80%
AVAILABLE SIZES	✓	76%
<b>CUSTOMER REVIEWS</b>		68%

# CUSTOMER REVIEWS

"My sister absolutely loves it and it came in on time, so I'm happy with it."



"Like with any Redbubble t-shirt, this one was great. The print stuck on perfectly, and the t-shirt is really comfy!"



"Love it!"



"nice case just a bit too slippy had to stop using it !!!"



# CUSTOMER REVIEWS



## T-Shirt Reviews

### UNISEX T-SHIRT (1393 REVIEWS)

★★★★★ Average

krissi hart Jan 09, 2015

Quality ★★★★★ Print ★★★★★ Arrived: On time

Women's sizes run small, had to go up 2 sizes.

Hannah Felter Jan 08, 2015

Quality ★★★★★ Print ★★★★★ Arrived: Early

It's a gift, so I didn't try it on, but it seems like a good quality shirt.

The print is high quality.

Richard Mayrhofer Jan 09, 2015

Quality ★★★★★ Print ★★★★★ Arrived: Late

The shirt fits well.

The print is high quality.

# AVAILABLE SIZES

		USE IT EVERY TIME
PRICE	✓	100%
PRODUCT DESCRIPTION	✓	95%
PRODUCT IMAGE	✓	90%
SHIPPING INFORMATION	✓	80%
PRODUCT RATING WITH STARS		80%
<b>AVAILABLE SIZES</b>	✓	76%
CUSTOMER REVIEWS		68%

# SIZING CHART



T-Shirts & Hoodies

CLOTHING STYLE:  
Unisex T-Shirt

Color selection grid with a checkmark on the black color swatch.

Size selection: S M L XL 2XL 3XL

[Sizing Chart](#)

Front OR Back

**\$26.94**

x 1 **ADD TO CART**

[T-Shirts & Hoodies Info](#)



Our classic Unisex T-Shirt is the staple of anyone's wardrobe. A finely tailored men's shirt constructed from 100% cotton, or a perfectly formed women's shirt for those who don't enjoy the more fitting nature of our Women's T-Shirt. With a vast range of colors to choose from there's no excuse for not having an arsenal of these ready for any eventuality.



Size	Chest (cm)	Front Body Length (cm)	Chest (inches)	Front Body Length (inches)
S	43cm	72cm	17"	28.5"
M	49cm	73cm	19.5"	29"
L	54.5cm	76cm	21.5"	30"
XL	59cm	80cm	23"	31.5"
2XL	63.5cm	81.5cm	25"	32"
3XL	69cm	81.5cm	27"	32"



# PRODUCT SWITCHER

Men Women Kids Cases Stickers Wall Art Home Decor Stationery Tote Bags Gift Certificates

WOLFANDBIRD > PORTFOLIO > EVERYTHING HAPPENS FOR A REASON



iPhone Cases

STYLE:

iPhone 6 - Snap

**\$25.00**

x 1 **ADD TO CART**

*i* iPhone Cases Info

Available to buy on...

T-Shirts & Hoodies

Cases

Stickers

Prints & Cards

Home Decor

Tote Bags

## Everything Happens for a Reason

by wolfandbird

+ FOLLOW

Like 16

★ Favorite

Share

# PRODUCT SWITCHER

Men Women Kids Cases Stickers Wall Art Home Decor Stationery Tote Bags Gift Certificates

WOLFANDBIRD > PORTFOLIO > EVERYTHING HAPPENS FOR A REASON



iPhone Cases

STYLE:

iPhone 6 - Snap

**\$25.00**

x 1 **ADD TO CART**

*i* iPhone Cases Info

## Everything Happens for a Reason

by wolfandbird

+ FOLLOW

Like 16

Favorite

Share

WOLFSKULLJACK > PORTFOLIO > WEIRD LOVE



T-Shirts & Hoodies

CLOTHING STYLE:  
Baseball ¾ Sleeve

XS S M L XL [Sizing Chart](#)

Front OR Back

**\$28.64**

x 1 **ADD TO CART**

*T-Shirts & Hoodies Info*

Available to buy on...

T-Shirts & Hoodies

Stickers

## Weird Love

by WOLFSKULLJACK

+ FOLLOW

Like 19

Favorite

Share

More Work Description Comments (10)

### WOLFSKULLJACK'S PORTFOLIO





## Weird Love

T-Shirts &amp; Hoodies



CLOTHING STYLE:

Baseball ¾ Sleeve



XS

S

M

L

XL

Front

OR

Back

\$31.14

x 1

ADD TO CART



WOLFSKULLJACK

CHELTENHAM, UNITED KINGDOM

FOLLOW

PRODUCT  
INFO

REVIEWS (3)

AVAILABLE  
PRODUCTS

17

ARTIST  
NOTES

COMMENTS

13

## Sizing Information

	XS	S	M	L	XL
Chest	82cm	90cm	100cm	110cm	120cm
Length	63cm	66cm	68cm	71cm	73cm



## Features

- Available in a variety of sleeve colors
- Sweatshop-free, ethically sourced 50% cotton / 50% polyester apparel
- Slim fit, order a size up if you'd like it less fitting
- Cold wash and hang out to dry



## Weird Love

T-Shirts & Hoodies



CLOTHING STYLE:

Baseball ¾ Sleeve



XS S M L XL

Front

OR

Back

\$31.14

x 1

ADD TO CART



WOLFSKULLJACK

CHELtenham, UNITED KINGDOM

FOLLOW

PRODUCT INFO



REVIEWS (3)



AVAILABLE PRODUCTS

17

ARTIST NOTES



COMMENTS

13

### Baseball ¾ Sleeve Reviews

Yay

Megan May 23, 2015

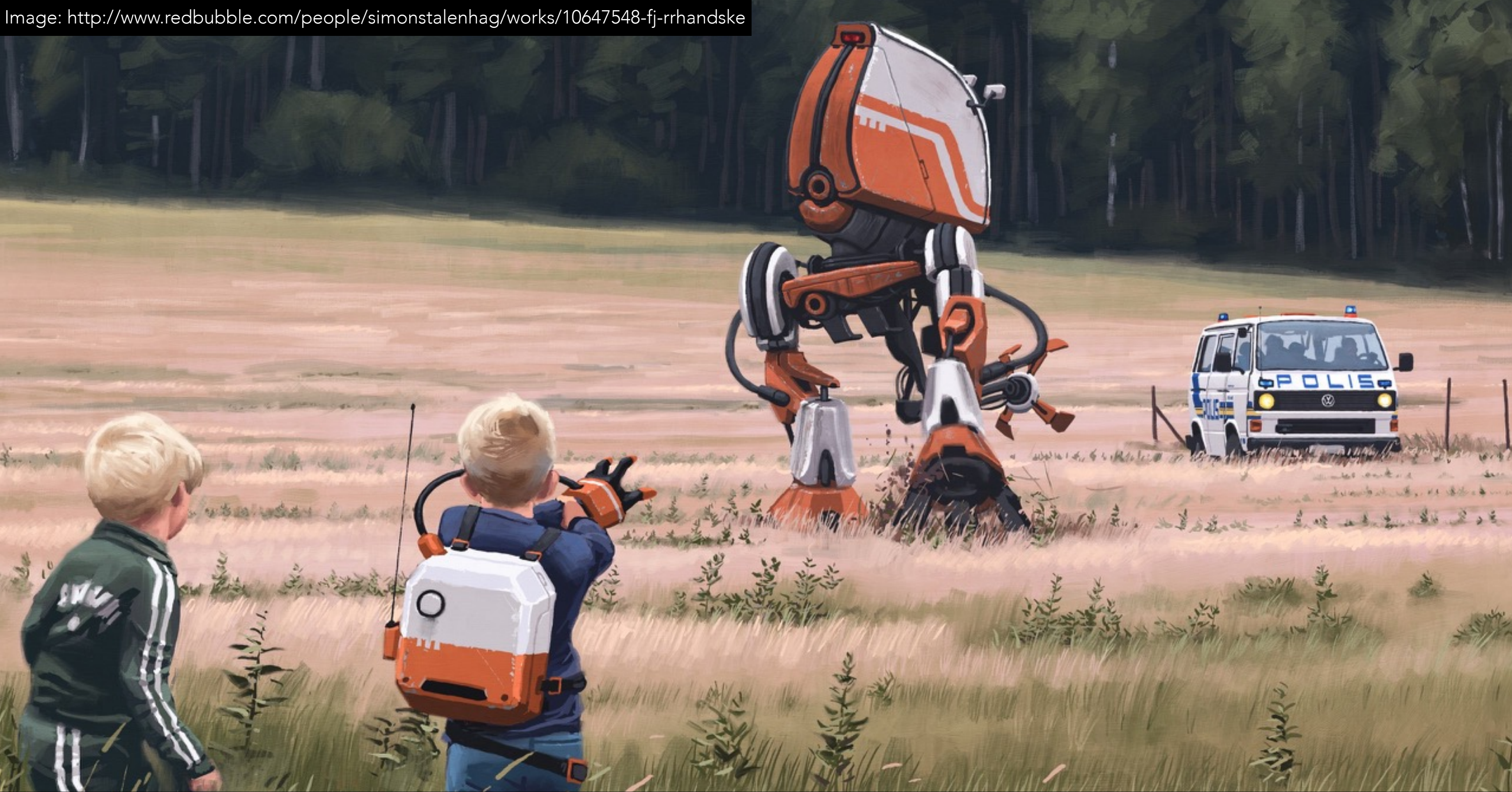
I love the baseball tee. Great quality and true to size. Thank you.



excellent !!!!!

Sarah Apr 8, 2015





WHAT HAVE WE LEARN'T?

A/B TESTING CAN ONLY  
TELL YOU WHAT  
HAPPENED.

IT CAN'T TELL YOU WHY  
SOMETHING HAPPENED.

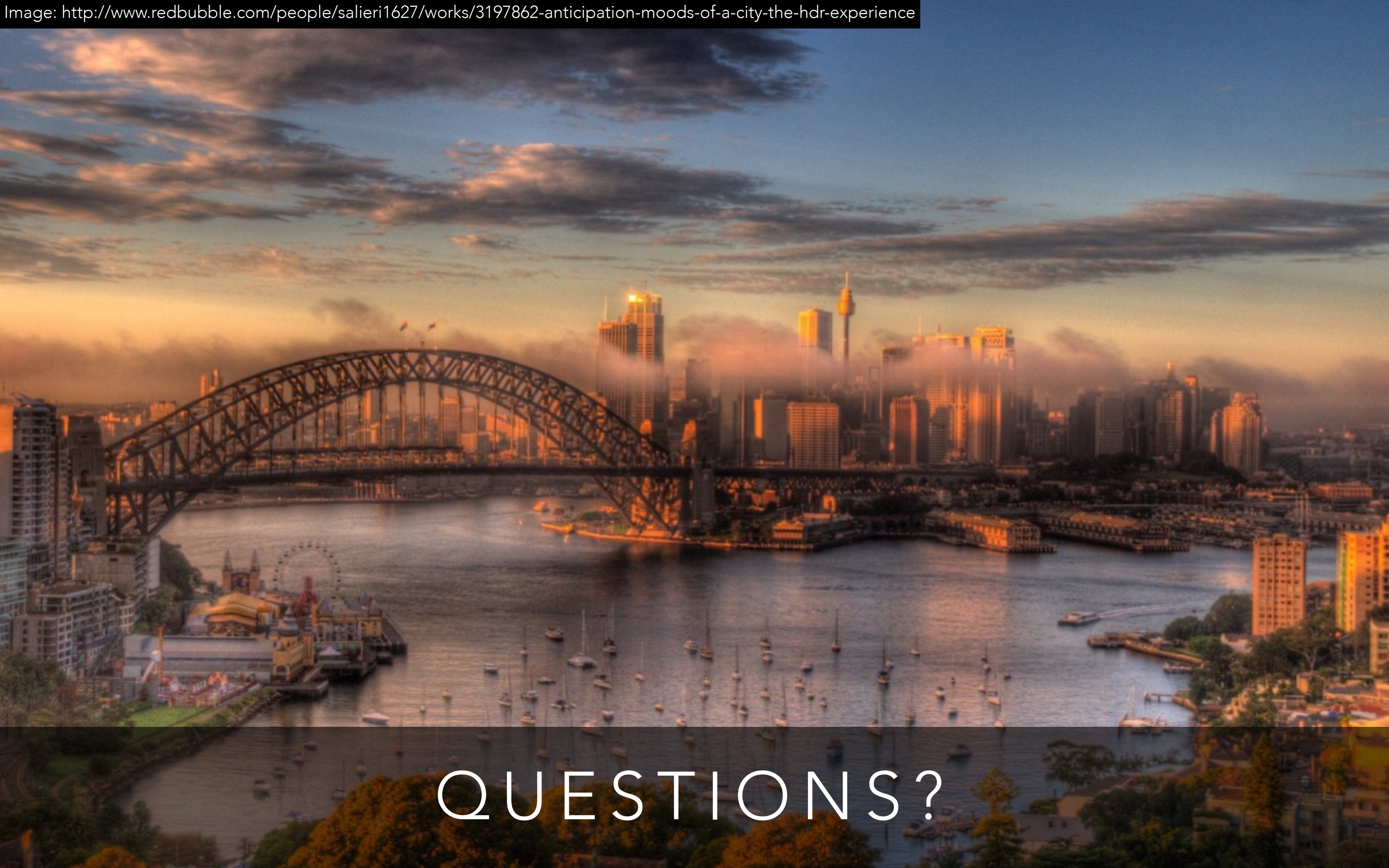
TALK TO YOUR CUSTOMERS  
TO FIND OUT THE WHYS.



DEFINE THE METRICS  
YOU WANT TO  
MEASURE UP FRONT.

FOCUS ON LEARNING  
INSTEAD OF  
METRIC OPTIMISATION.

IT'S LIKE TDD,  
BUT FOR BUSINESS VALUE.



QUESTIONS?