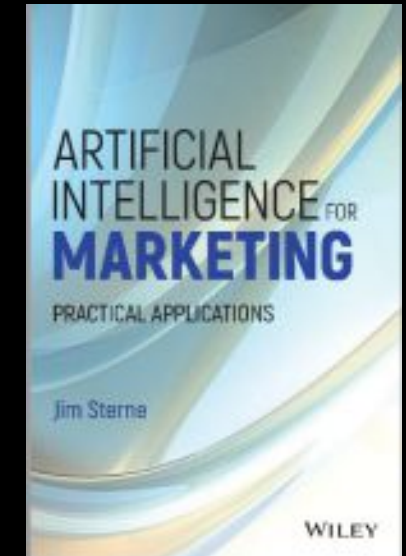
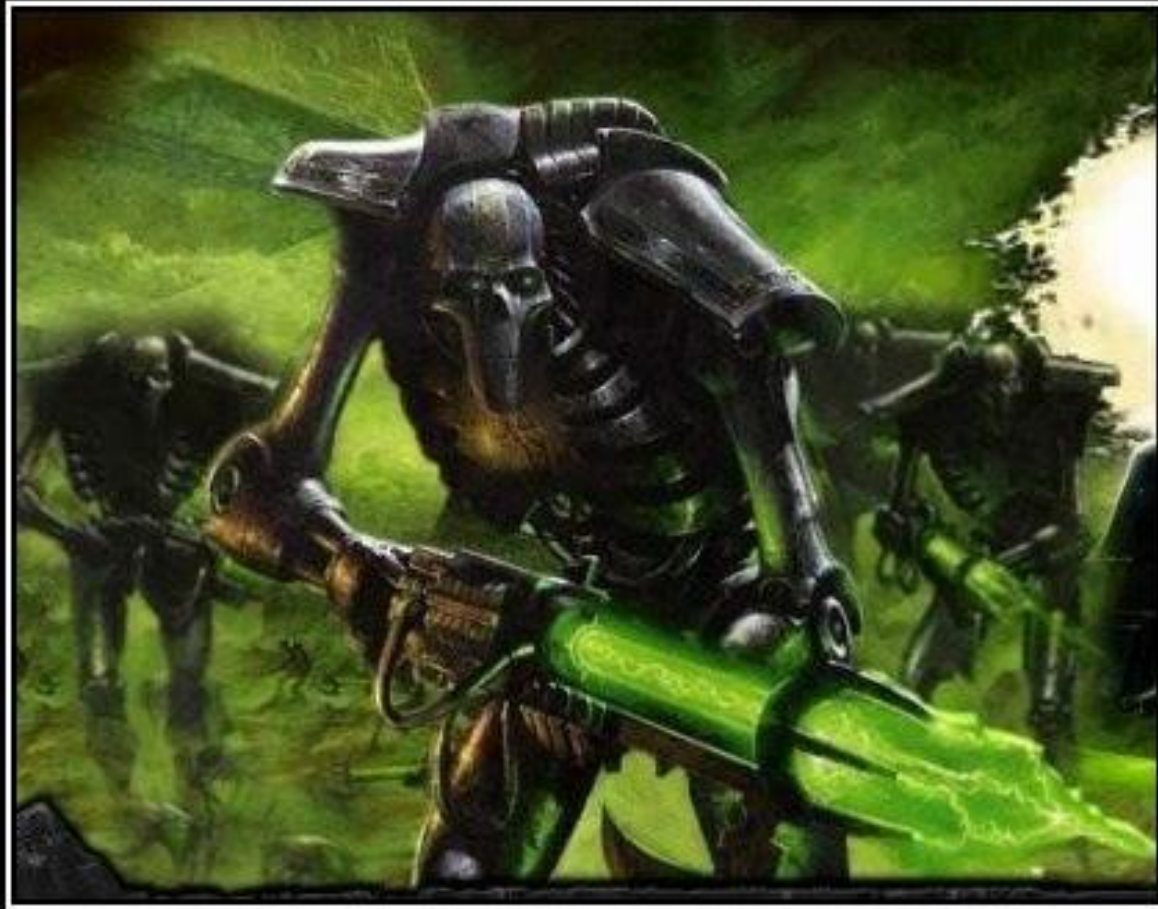


# Jim Sterne

## This Time, the Robots ARE Coming to Disrupt Marketing





# ROBOT ZOMBIES WITH LAZERS



# As Seen on TV



AI: Anything computers can't  
SciFi: Anything AI can't



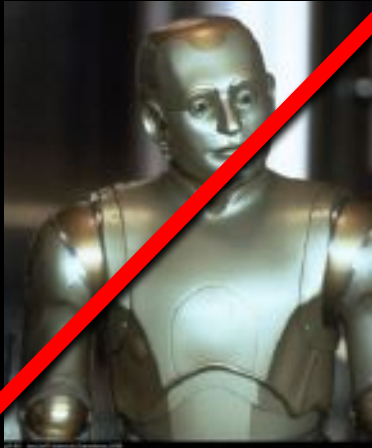
“General AI” – thinks and acts human  
Sentience = SciFi

“Narrow AI” – task specific  
Functional

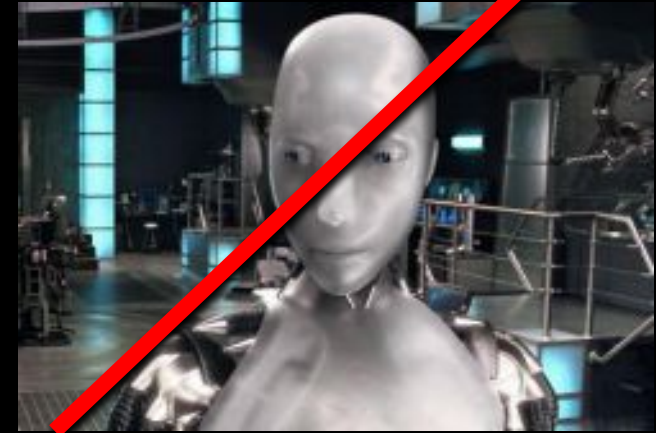




# As Seen on TV

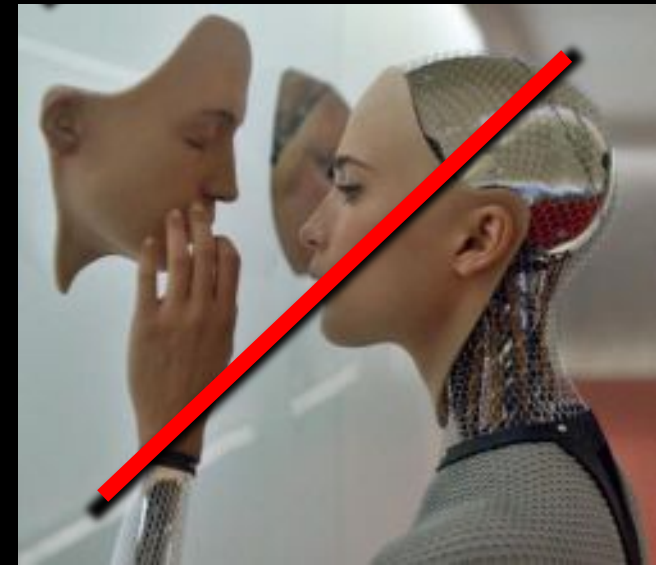


AI: Anything computers can't  
SciFi: Anything AI can't



“General AI” – thinks and acts human  
Sentience = SciFi

“Narrow AI” – task specific  
Functional



# Artificial Intelligence

Natural Language Processing

Conversation Bots

Computer Vision

Self-Driving Cars & Robots

**Machine Learning**

# Software Grows Up

Specific Logic

Mathematical Model

Statistical Model

Machine Learning

# Software Grows Up

## Specific Logic

## Mathematical Model

```
{A:13,BUTTON:0,CHECKBOX:32,COMBOBOX:13,GRIDCELL:13,LINK:13,LISTBOX:13,MENU:0,MENUBAR:0,MENUITEM:0,MENUITEMCHEC  
KBOX:0,MENUITEMRADIO:0,OPTION:0,RADIO:32,RADIOGROUP:32,RESET:0,SUBMIT:0,SWITCH:32,TAB:0,TREE:13,TREEITEM:13},G  
=function(a){return(a.getAttribute("type")||a.tagName).toUpperCase()in ba},H=function(a){return  
(a.getAttribute("type")||a.tagName).toUpperCase()in ca},ba={CHECKBOX:!0,OPTION:!0,RADIO:!0},ca={COLOR:!0,  
DATE:!0,DATETIME:!0,"DATETIME-LOCAL":!0,EMAIL:!0,MONTH:!0,NUMBER:!0,PASSWORD:!0,RANGE:!0,SEARCH:!0,TEL:!0,  
TEXT:!0,TEXTAREA:!0,TIME:!0,URL:!0,WEEK:!0},da={A:!0,AREA:!0,BUTTON:!0,DIALOG:!0,IMG:!0,INPUT:!0,LINK:!0,MENU:  
!0,OPTGROUP:!0,OPTION:!0,PROGRESS:!0,SELECT:!0,TEXTAREA:!0};var I=function(){this.i=this.g=null}
```

## Statistical Model

## Machine Learning

# Software Grows Up

## Specific Logic

Do this, then this, then this  
If this happens, do that  
If confused, report error

## Mathematical Model

## Statistical Model

## Machine Learning





Your PC ran into a problem and needs to restart. We're just collecting some error info, and then we'll restart for you.

35% complete

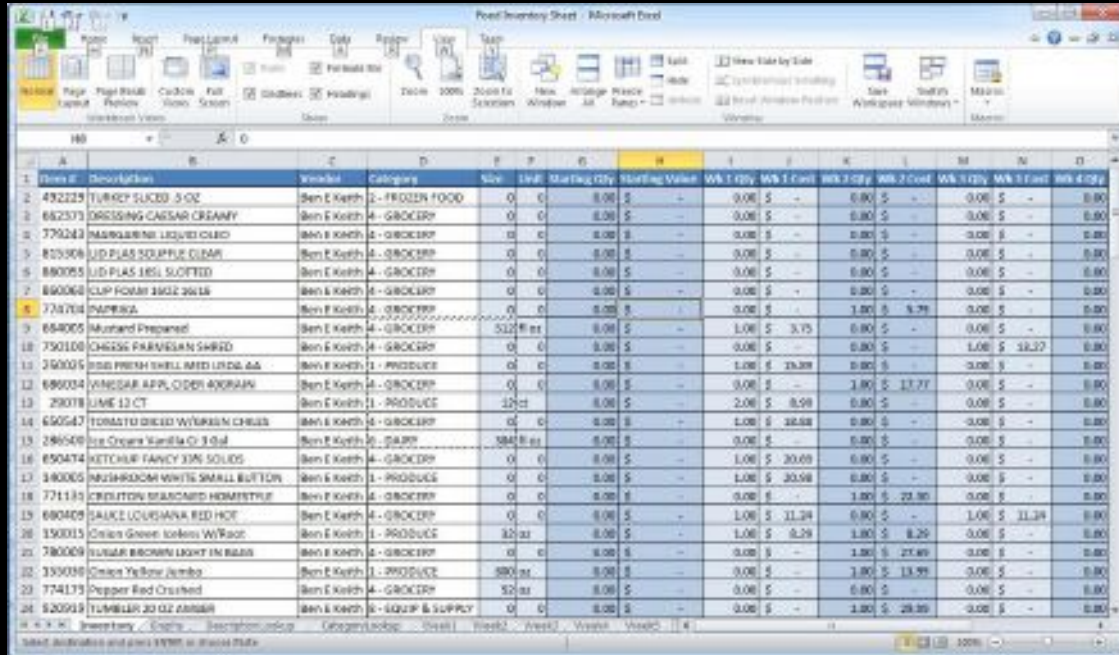


For more information about this issue and possible fixes, visit <https://www.windows.com/stopcode>

If you call a support person, give them this info:

Stop code: DRIVER\_IRQL\_NOT\_LESS\_OR\_EQUAL

# Software Grows Up



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
	Item #	Description	Vendor	Category	Size	Unit	Start Date	Ending Value	Wk 1 Qty	Wk 1 Cost	Wk 2 Qty	Wk 2 Cost	Wk 3 Qty	Wk 3 Cost	Wk 4 Qty
1	492225	TURKEY SLICED 5 OZ	Ben E Keith	1 - FROZEN FOOD	0	0	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$
2	652573	DRESSING CAESAR CREAMY	Ben E Keith	4 - GROCERY	0	0	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$
3	779243	MARSHMALLOW LIQUEUR CUCO	Ben E Keith	4 - GROCERY	0	0	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$
4	819308	LID PLUS SQUEEZE CLEAR	Ben E Keith	4 - GROCERY	0	0	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$
5	880085	LID PLUS 18SL SLOTTED	Ben E Keith	4 - GROCERY	0	0	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$
6	860060	CLIP FLOWN 1802 2018	Ben E Keith	4 - GROCERY	0	0	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$
7	728704	MAPLE	Ben E Keith	4 - GROCERY	0	0	0.00 \$	0.00 \$	0.00 \$	0.00 \$	1.00 \$	9.79	0.00 \$	0.00 \$	0.00 \$
8	654005	Mozzarella Prepared	Ben E Keith	4 - GROCERY	512	ct	0.00 \$	0.00 \$	1.00 \$	3.75	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$
9	750100	CHEESE PARMESAN SHRED	Ben E Keith	4 - GROCERY	0	0	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$	1.00 \$	18.27	0.00 \$
10	250005	SHRIMP FRESH SHELL MED LINDA 6A	Ben E Keith	1 - PRODUCE	0	0	0.00 \$	0.00 \$	1.00 \$	29.39	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$
11	686004	VINEGAR APPLE ODER ANGRAN	Ben E Keith	4 - GROCERY	0	0	0.00 \$	0.00 \$	0.00 \$	0.00 \$	1.00 \$	13.77	0.00 \$	0.00 \$	0.00 \$
12	290378	LIME 12 CT	Ben E Keith	1 - PRODUCE	25	ct	0.00 \$	0.00 \$	2.00 \$	8.99	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$
13	650547	TOMATO DICED W/PEPPER CHEESE	Ben E Keith	4 - GROCERY	0	0	0.00 \$	0.00 \$	1.00 \$	18.88	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$
14	246549	Ice Cream Vanilla Cr 3 Gal	Ben E Keith	2 - DAIRY	384	fl oz	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$
15	650474	KETCHUP FANCY 33% SOLIDS	Ben E Keith	4 - GROCERY	0	0	0.00 \$	0.00 \$	1.00 \$	20.09	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$
16	340005	MUSHROOM WHITE SMALL BUTTER	Ben E Keith	1 - PRODUCE	0	0	0.00 \$	0.00 \$	1.00 \$	20.58	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$
17	771135	CRULLER MARSHMALLOW HONEYTYPE	Ben E Keith	4 - GROCERY	0	0	0.00 \$	0.00 \$	1.00 \$	22.30	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$
18	680409	SAUCE LOUISIANA RED HOT	Ben E Keith	4 - GROCERY	0	0	0.00 \$	0.00 \$	1.00 \$	11.34	0.00 \$	0.00 \$	1.00 \$	11.34	0.00 \$
19	350015	Onion Green, Peeled W/Root	Ben E Keith	1 - PRODUCE	32	oz	0.00 \$	0.00 \$	1.00 \$	8.29	1.00 \$	8.29	0.00 \$	0.00 \$	0.00 \$
20	780009	SUGAR BROWN LIGHT IN BAGS	Ben E Keith	2 - GROCERY	0	0	0.00 \$	0.00 \$	0.00 \$	0.00 \$	1.00 \$	22.85	0.00 \$	0.00 \$	0.00 \$
21	330039	Onion Yellow Jumbo	Ben E Keith	1 - PRODUCE	380	oz	0.00 \$	0.00 \$	0.00 \$	0.00 \$	1.00 \$	13.91	0.00 \$	0.00 \$	0.00 \$
22	774173	Pepper Red Crushed	Ben E Keith	4 - GROCERY	32	oz	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$
23	820019	TUMBLER 20 OZ 2018	Ben E Keith	2 - EQUIP & SUPPLY	0	0	0.00 \$	0.00 \$	0.00 \$	0.00 \$	1.00 \$	29.30	0.00 \$	0.00 \$	0.00 \$

## Mathematical Model

Describe numerical relationships

Calculate alternatives

Human compares results & iterates

## Machine Learning

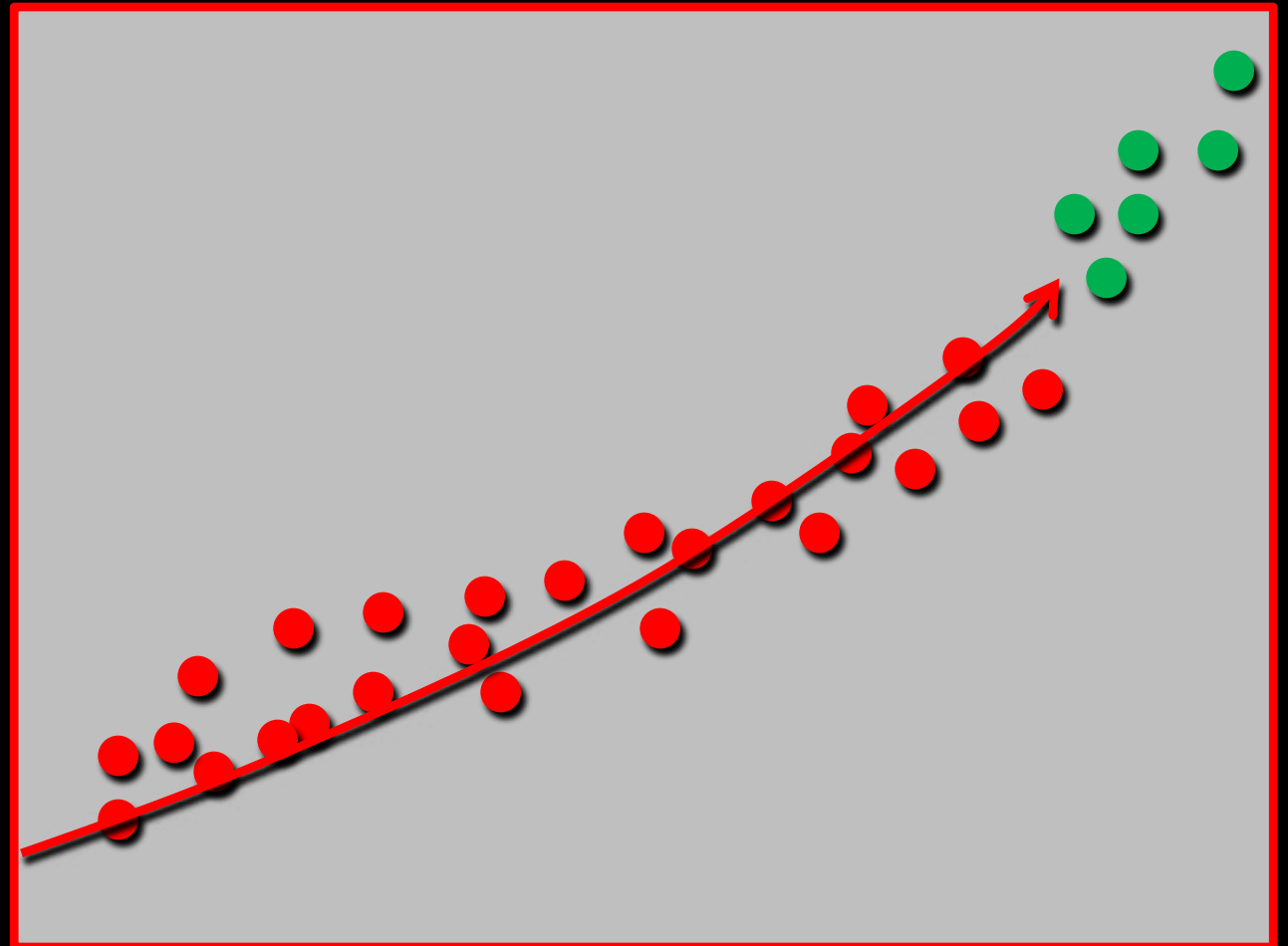
# Software Grows Up

## Specific Logic

Do this, then this, then this  
If this happens, do that  
If confused, report error

## Statistical Model

Calculate probabilities  
Project likelihoods  
Human compares & iterates



# Software Grows Up

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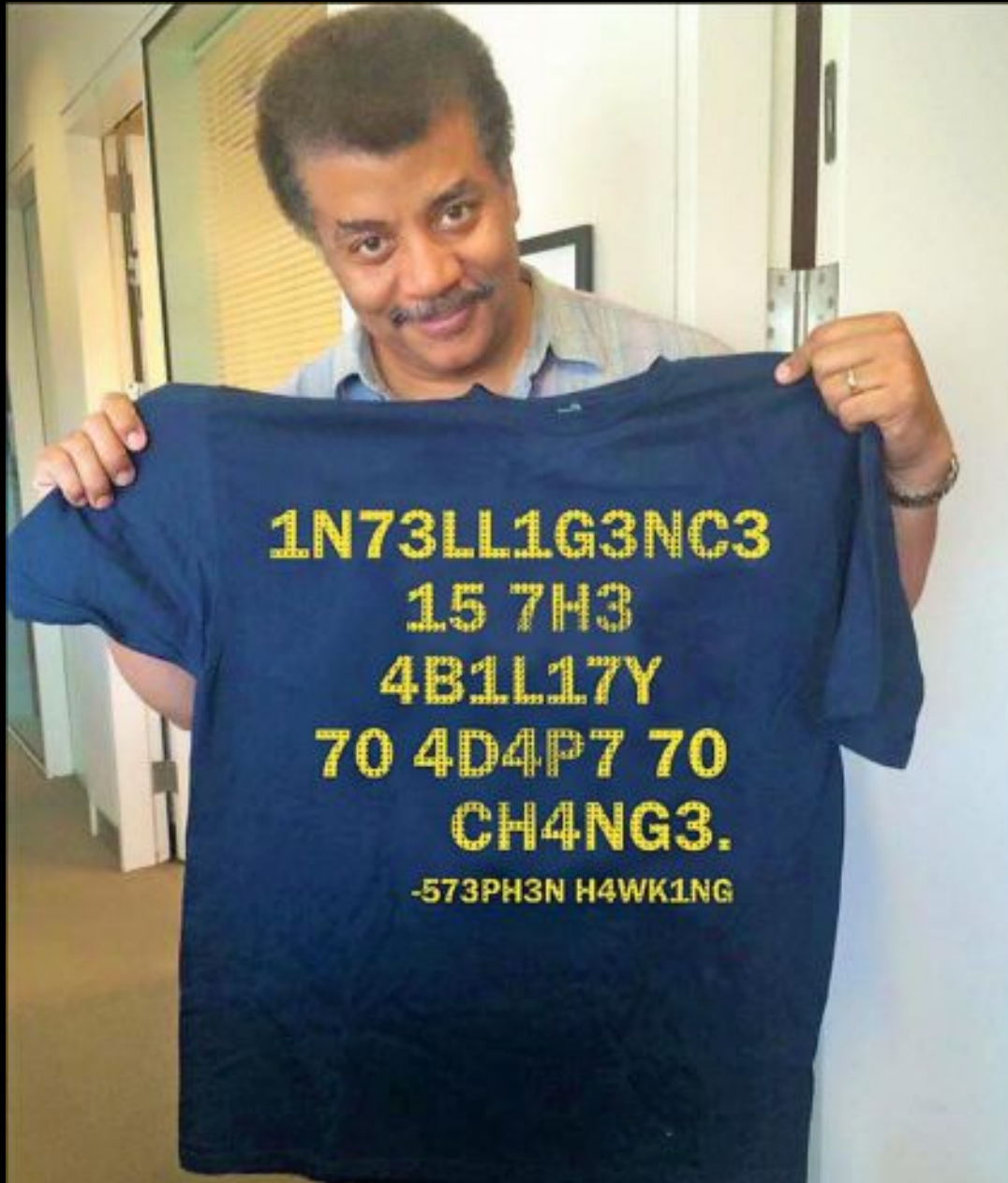
## Machine Learning

Uses examples to figure it out  
and changes its mind

# Software Grows Up

## Machine Learning

Uses examples to figure it out  
and changes its mind





# Machine Learning

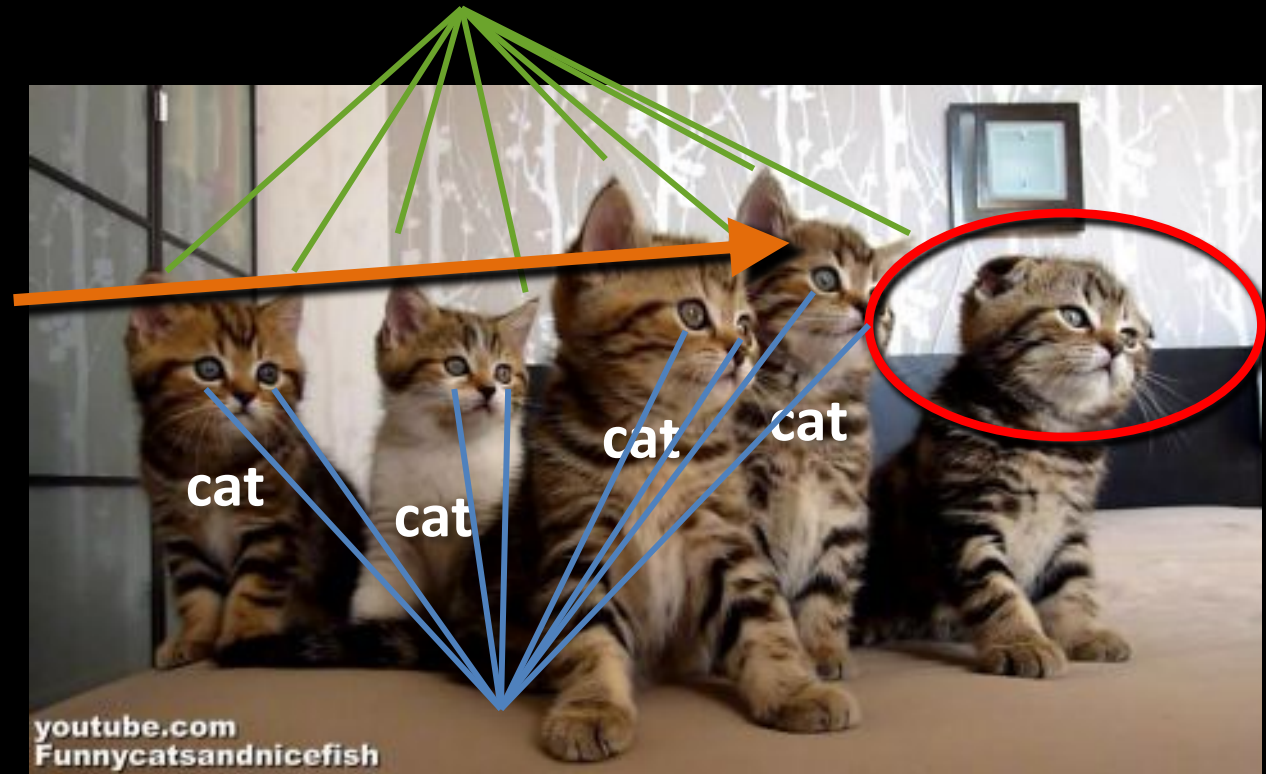
Supervised

Unsupervised

Reinforcement

# Machine Learning Supervised

You know the right answer  
needs many examples  
of labeled data



# Cat or croissant?



MrB



VIA 9GAG.COM



# Machine Learning

## Supervised

You know the right answer  
needs many examples  
of labeled data



# Machine Learning

## Supervised

You know the right answer  
needs many examples  
of labeled data

## Unsupervised

You don't know the right answer  
finds patterns in unlabeled data  
may or may not be useful (correlation/causation)



Photo by [ian dooley](#) on [Unsplash](#)

Photo by [Cristian Palmer](#) on [Unsplash](#)

# Machine Learning

## Supervised

You know the right answer  
needs many examples  
of labeled data

## Reinforcement

No absolute right answer  
some answers are better  
"rewards" results + optimizes over time

## Unsupervised

You don't know the right answer  
finds patterns in unlabeled data  
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Photo by Marek Szturc on Unsplash



# Machine Learning

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You know the right answer  
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## Unsupervised

You don't know the right answer  
finds patterns in unlabeled data  
may or may not be useful (correlation/causation)

# Machine Learning

## Supervised

Customers vs. never bought  
High CLV vs. profit drains  
Tech support vs. cancellation

## Reinforcement

Email opens and clickthroughs  
Display ad response  
Conversion rate optimization

## Unsupervised

Find look-alike prospects  
People who act like this buy that  
Ads with these features attract higher CVL customers

# Software Grows Up

## Machine Learning

Uses examples to figure it out  
and changes its mind

# Marketing Operations is Changing

## Market Research

# Marketing Operations is Changing

Market Research  
Word of Mouth



## Discovering Customer Experience Trends with Natural Language Processing

Last updated on September 19, 2018 by Dylan Azulay

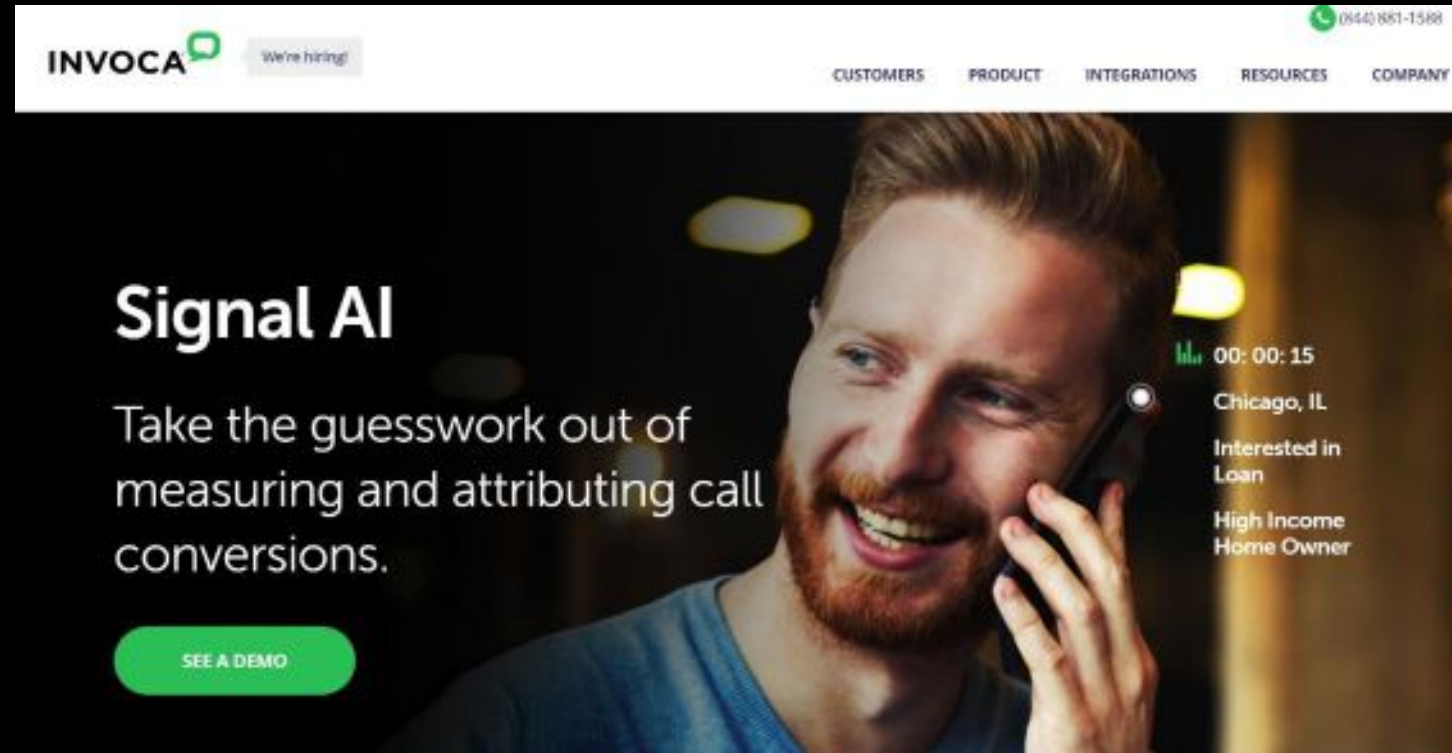
[in](#) [Twitter](#) [f](#) [Email](#)

Understanding customer feedback gets harder and harder at greater scale and with a greater variety of channels through which customers can provide feedback.

<https://www.techemergence.com/discovering-customer-experience-trends-natural-language-processing/>

# Marketing Operations is Changing

Market Research  
Word of Mouth



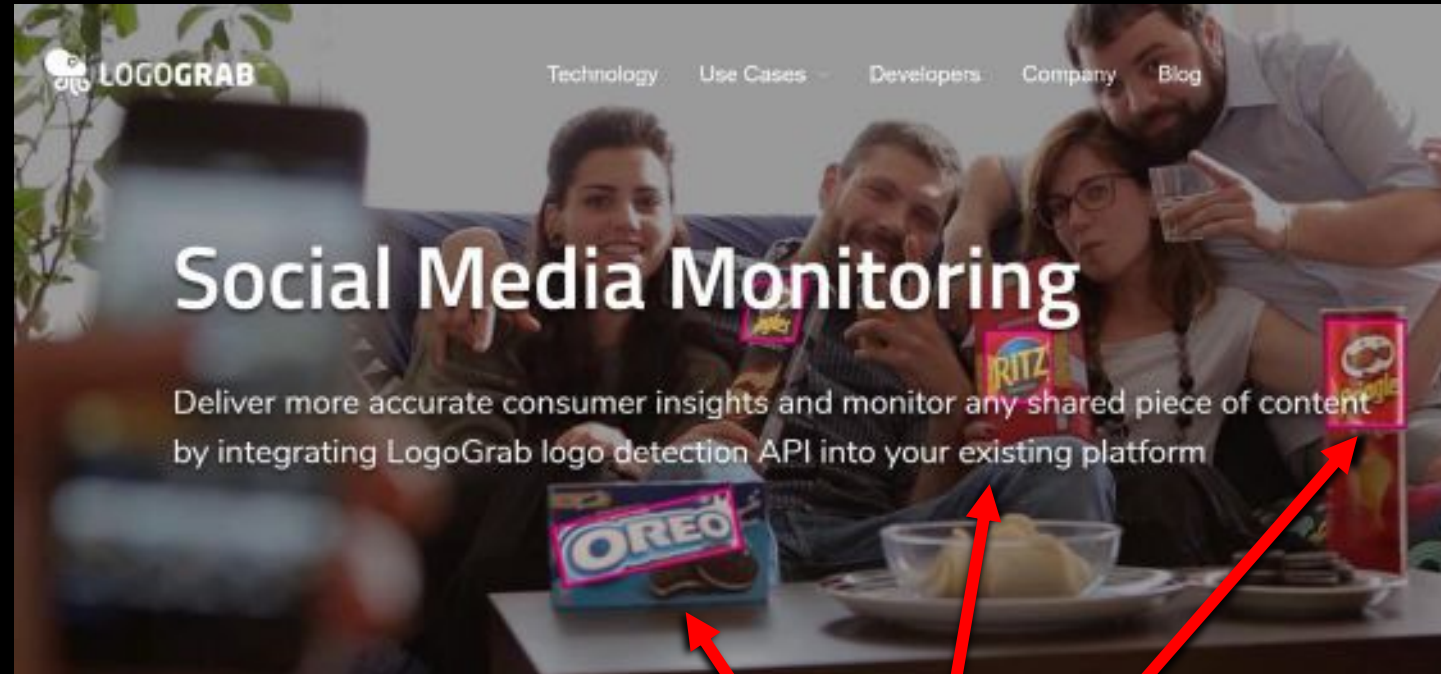
The screenshot shows the Invoca website header with the logo and a "We're hiring!" button. The navigation menu includes "CUSTOMERS", "PRODUCT", "INTEGRATIONS", "RESOURCES", and "COMPANY". A contact number "0844 861-1588" is visible in the top right. The main content area features a large image of a smiling man on a phone call. Overlaid on the image is the text "Signal AI" and "Take the guesswork out of measuring and attributing call conversions." Below this is a green "SEE A DEMO" button. On the right side of the image, there is a data overlay showing a call duration of "00: 00: 15", the location "Chicago, IL", and the customer's interests: "Interested in Loan" and "High Income Home Owner".

Invoca.com



# Marketing Operations is Changing

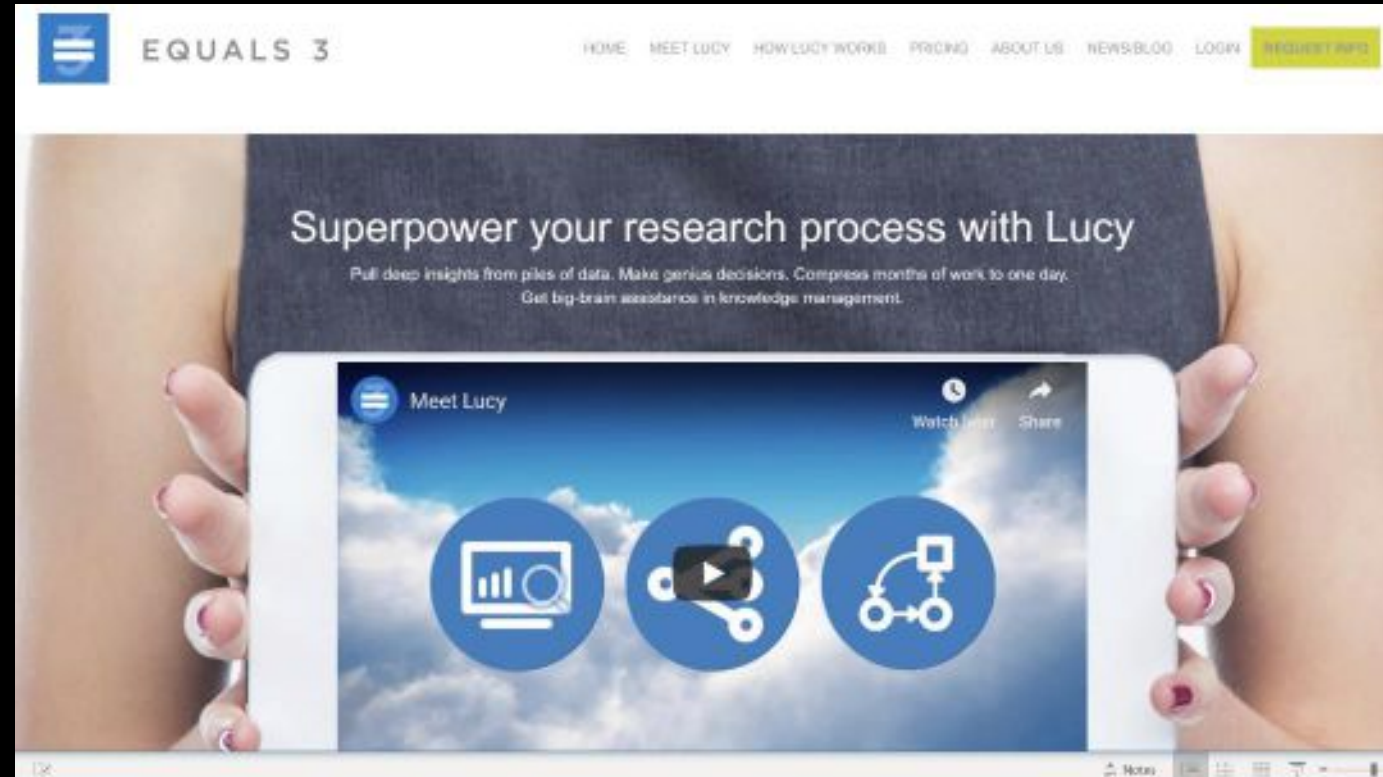
Market Research  
Word of Mouth



LogoGrab.com

# Marketing Operations is Changing

Market Research  
Word of Mouth  
Literature Eval



Equals3.ai

# Marketing Operations is Changing

Market Research  
Word of Mouth  
Literature Eval



Tell me everything about marketing shoes  
with a budget between \$ 2 million and \$ 7 million  
in the past 4 years  
in the EU  
with a celebrity spokesperson

Equals3.ai

# Marketing Operations is Changing

Market Research

Test Coordination

Audience Targeting

Project Planning

Message Creation

Project Staffing

Creative Design

Meeting Scheduling

Ad Spend

Budget Allocation

Loyalty Management

Data Cleansing

# What Can ML Do Better?

Correlations	people with <i>this</i> attribute have <i>that</i> attribute
Segmentation	these people form a group
Clustering	there are X number of groups
Anomalies	these people are unique

Are results interesting? Useful? Worthy of further study?

# The Big Guys

Adobe

Sensei

IBM

Watson

Oracle

Intelligent Cloud Applications

Salesforce

Einstein

SAP

Leonardo

Shopify

Kit

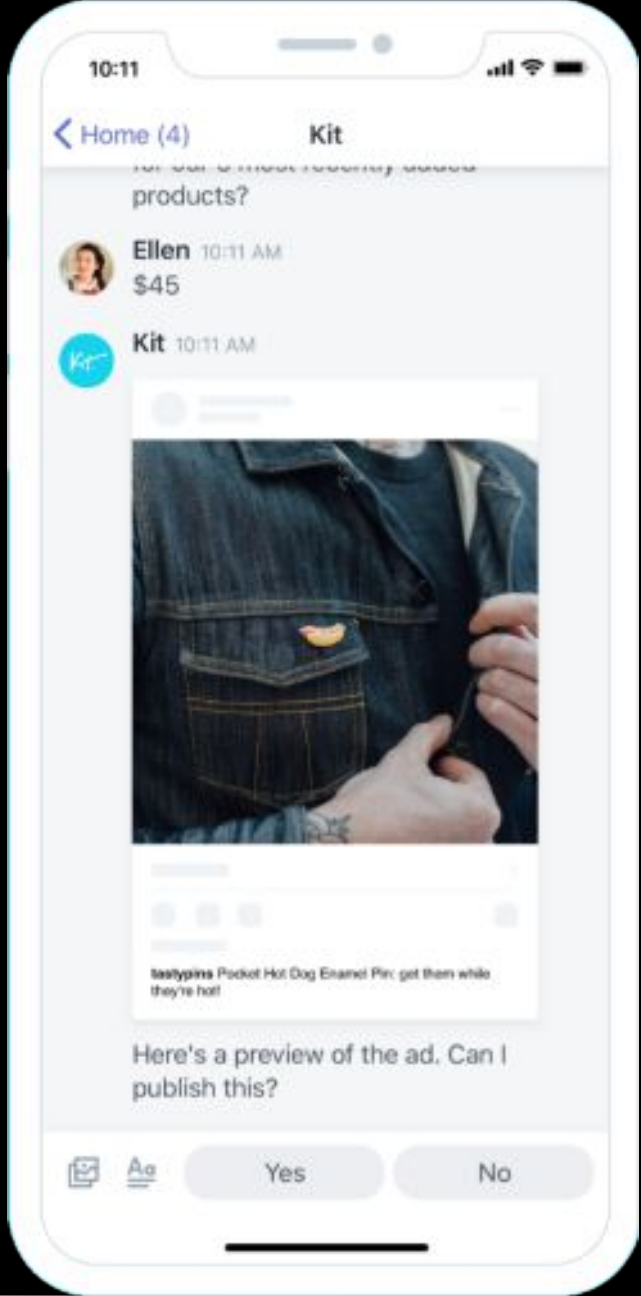
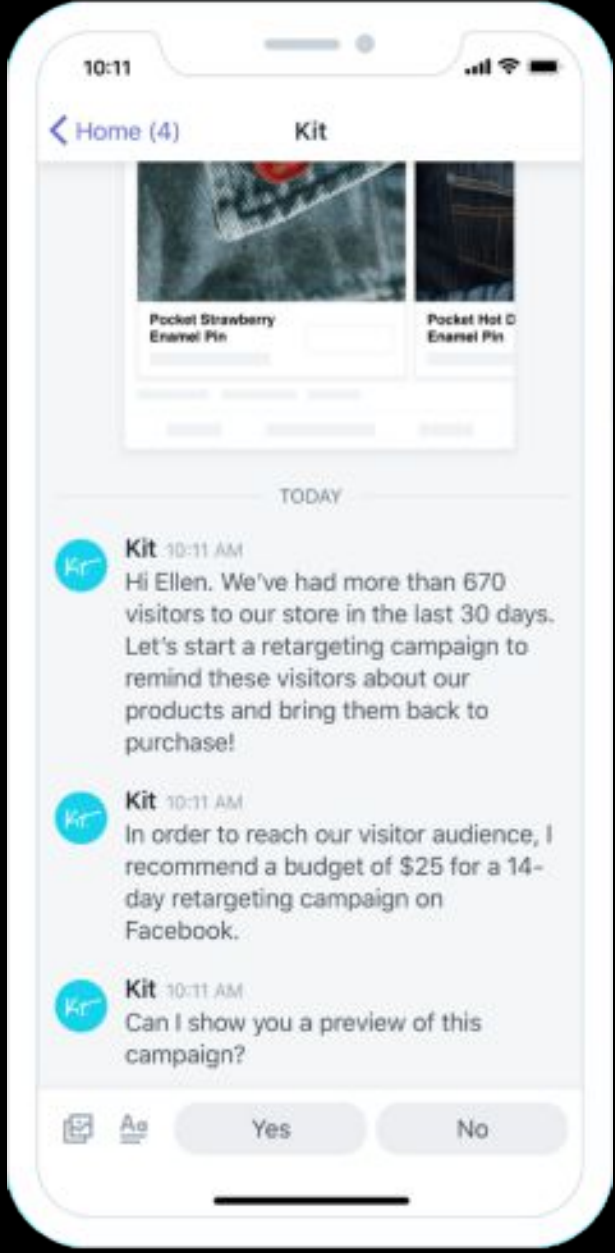
# Shopify Kit

## Frequently asked questions

### **How many Shopify stores are there?**

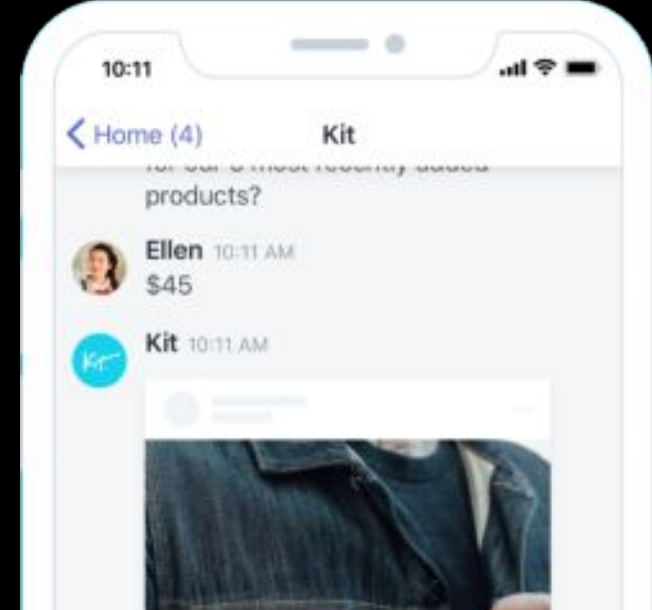
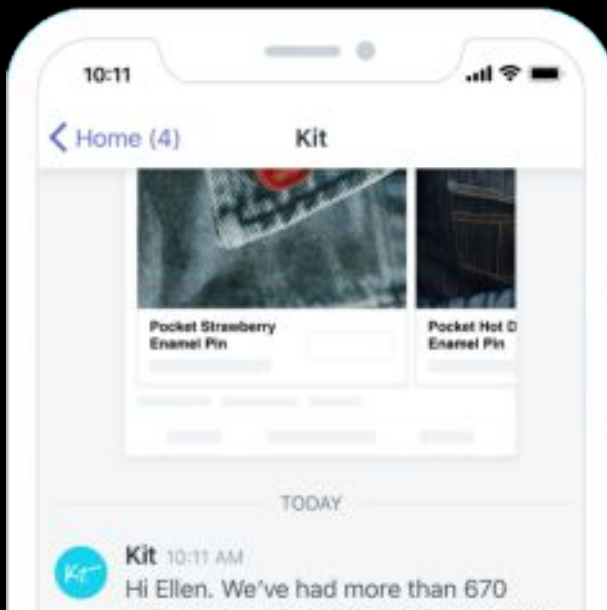
Last reported in February 2019, the figure quoted was more than 800,000 merchants are now powered by Shopify. 2017 saw an increase of 200,000+ new merchants.

# Shopify Kit





# Shopify Kit



## Easy Instagram and Facebook ads

Create highly-targeted social ad campaigns, effortlessly. Kit will write, build, and post the ad for you.



## Email marketing automation

Kit can send custom emails to your customers thanking them for their purchase and promoting new products and discounts.



## Powerful app integrations

Use other Shopify apps? Connect them to Kit so it can handle even more marketing tasks for you.

# Marketing Operations is Changing

Market Research

Test Coordination

Audience Targeting

Data Cleansing

Message Creation

Project Planning

Creative Design

Meeting Scheduling

Ad Spend

Staffing

Loyalty Management

Budget Allocation

Operations

# Customer Communication is Changing



Photo by [Jason Rosewell](#) on [Unsplash](#)

# Customer Communication is Changing



Photo by [Jason Rosewell](#) on [Unsplash](#)

# Customer Communication is Changing



Samsung  
Galaxy S10



# Customer Communication is Changing

Optimize for Voice

Optimize for Augmented Reality



# Augmented Reality

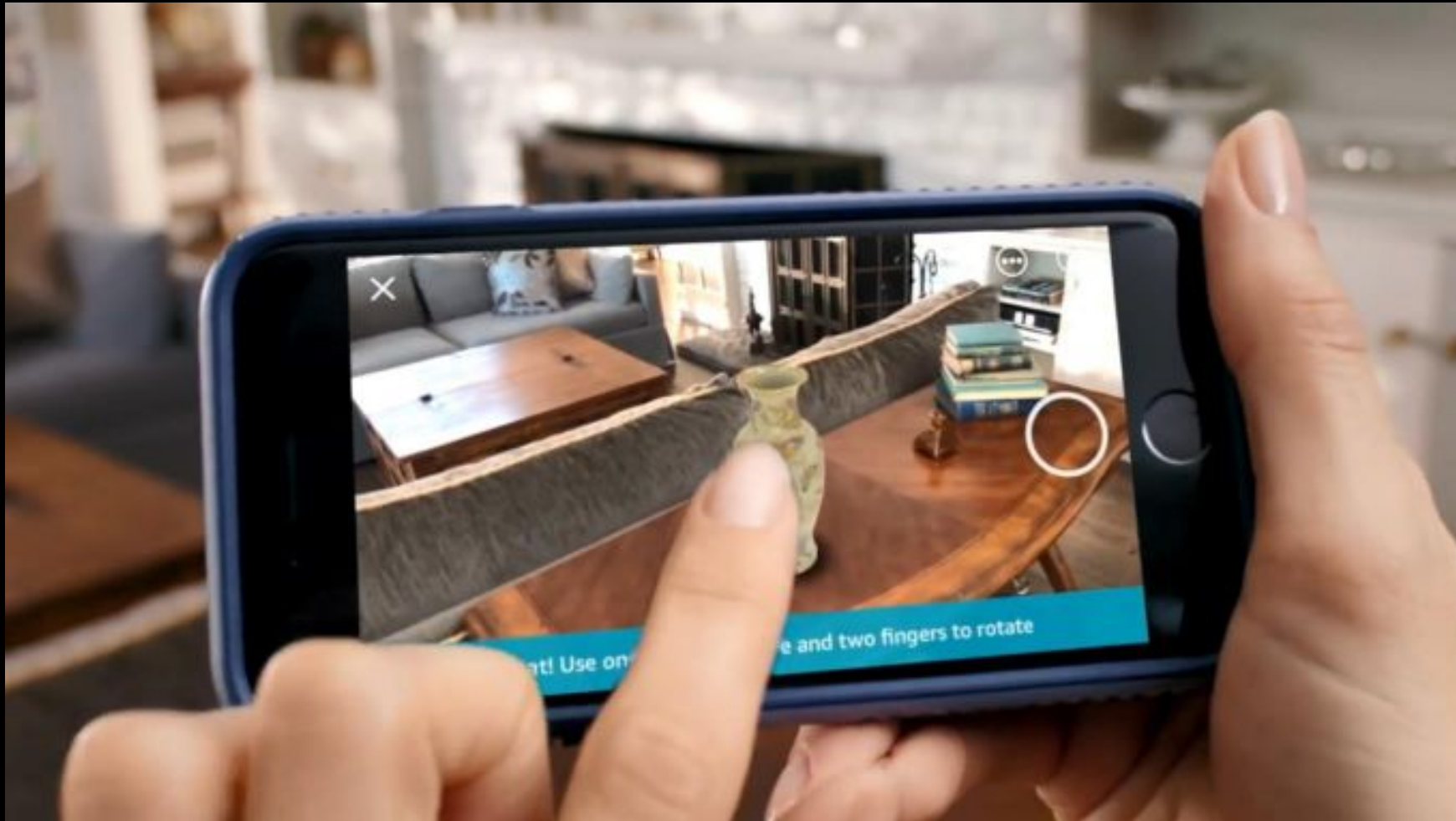


# Augmented Reality

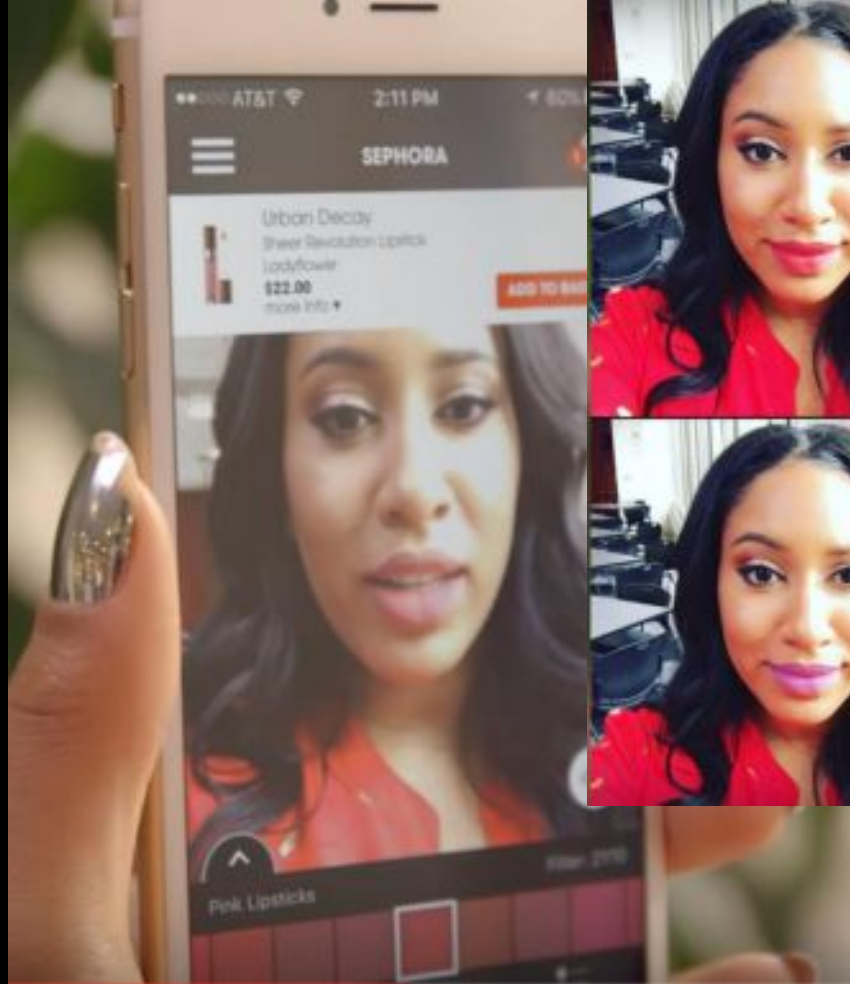




# Augmented Reality



# Facial Recognition



# Facial Recognition

## AI Mistakes Bus-Side Ad for Famous CEO, Charges Her With Jaywalking

By Tang Ziyi / Nov 22, 2018 04:17 PM / Society & Culture



An ad featuring Dong Mingzhu. Photo: VCG

# Customer Communication is Changing

Optimize for Voice

Optimize for Augmented Reality

Optimize for Facial Recognition

Optimize for Vehicle



# Car as Marketing Platform



# Car as Marketing Platform

Location-based ads - coordinate with billboards

Entertainment, work, and sleep apps

Take your brand on the road (curated road trip)

Delivery to car



# Optimize for Delivery



for your home

for your car

for your garage

**Open** convenience

Control what happens  
at your front door.

## Key Smart Lock Kit

Easily monitor and control your door  
with the Key App

Choose the smart lock that matches your style, download the Key App to unlock your door from anywhere, and if you've connected your kit with an Amazon Cloud Cam, you can check in anytime with a live view.



# Optimize for Delivery



for your home for your car for your garage

**Open anywhere**

Conveniently turn your vehicle into a personal mobile locker.



# Customer Communication is Changing

Optimize for Voice

Optimize for Augmented Reality

Optimize for Facial Recognition

Optimize for Vehicle

Optimize for Delivery

# Customer Communication is Changing

Optimize for Voice

Optimize for Augmented Reality

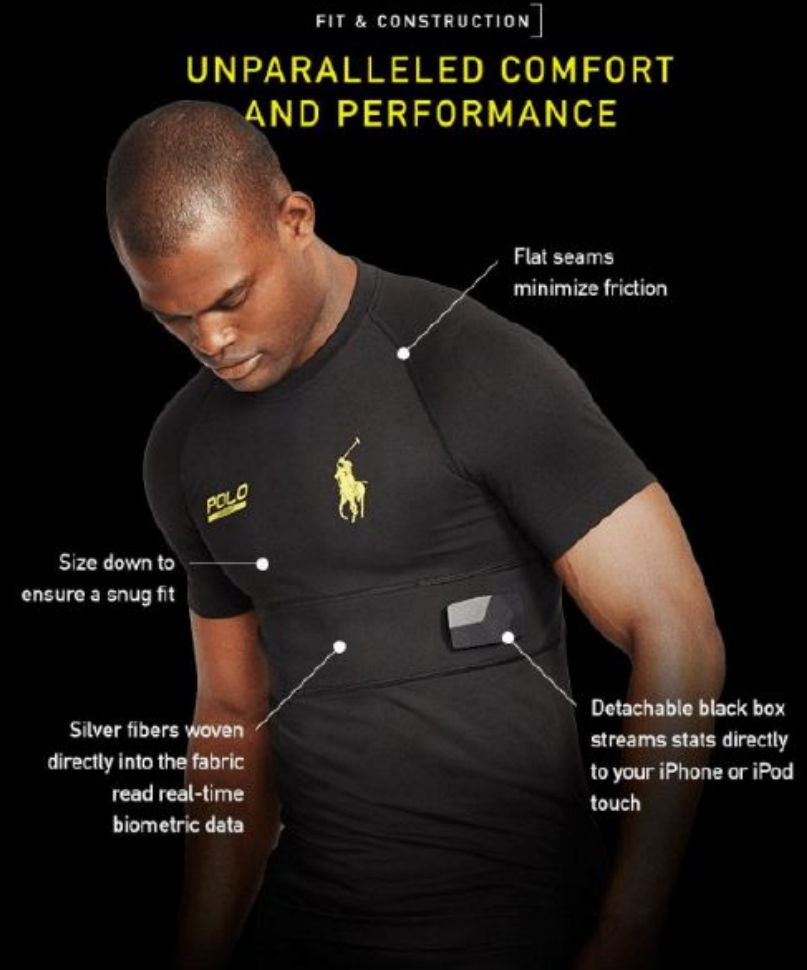
Optimize for Facial Recognition

Optimize for Vehicle

Optimize for Delivery

Optimize for Partnerships


# Customer Communication is Changing



# Customer Communication is Changing



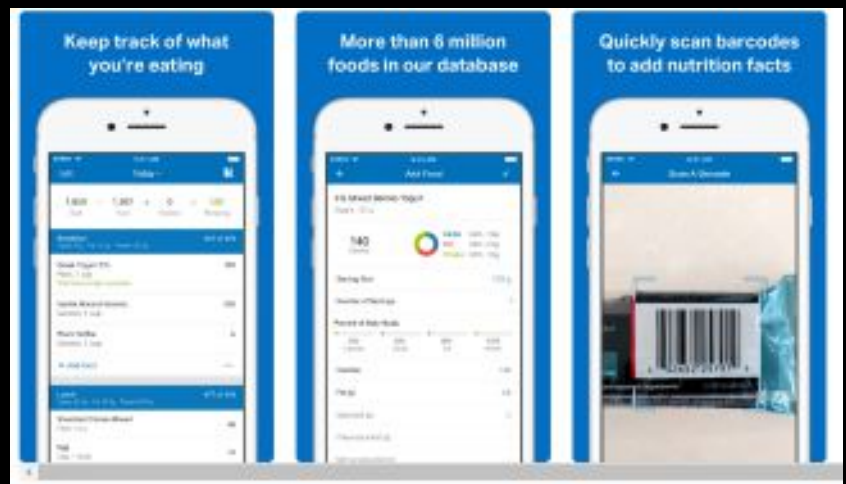
# Customer Communication is Changing



Size down to ensure a snug fit

Silver fibers woven directly into the fabric read real-time biometric data

Detachable black box streams stats directly to your iPhone or iPod touch



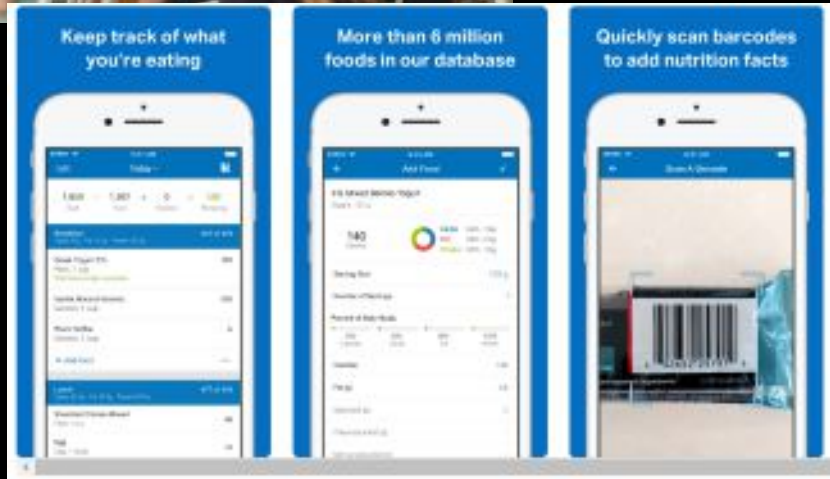
Keep track of what you're eating

More than 6 million foods in our database

Quickly scan barcodes to add nutrition facts



# Customer Communication is Changing



Size down to ensure a snug fit

Silver fibers woven directly into the fabric read real-time biometric data

Detachable black box streams stats directly to your iPhone or iPod touch

# Customer Communication is Changing

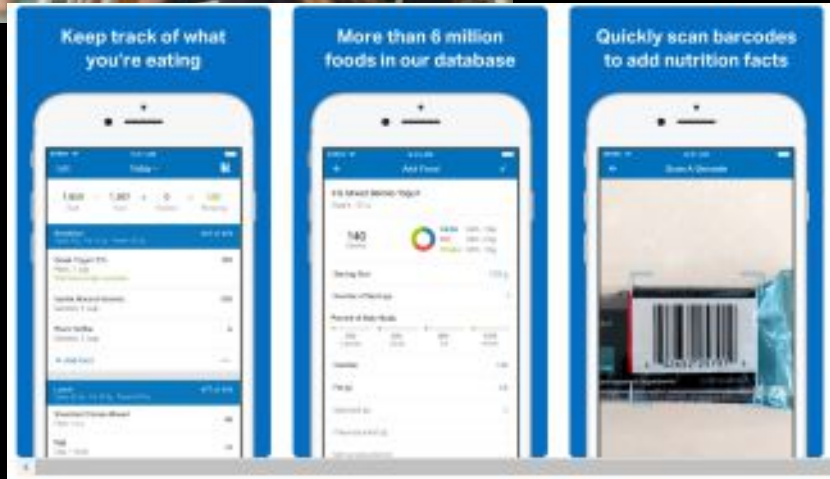
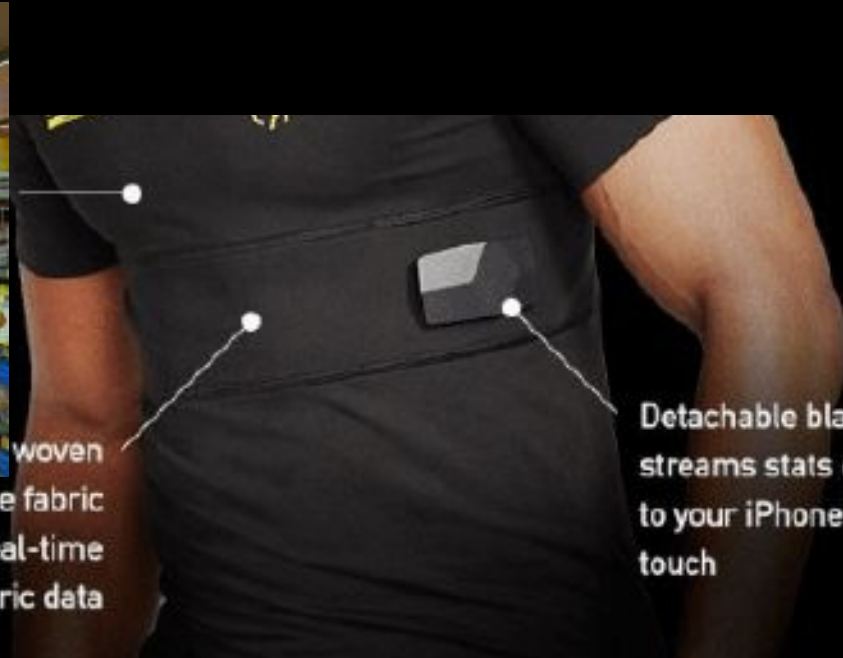
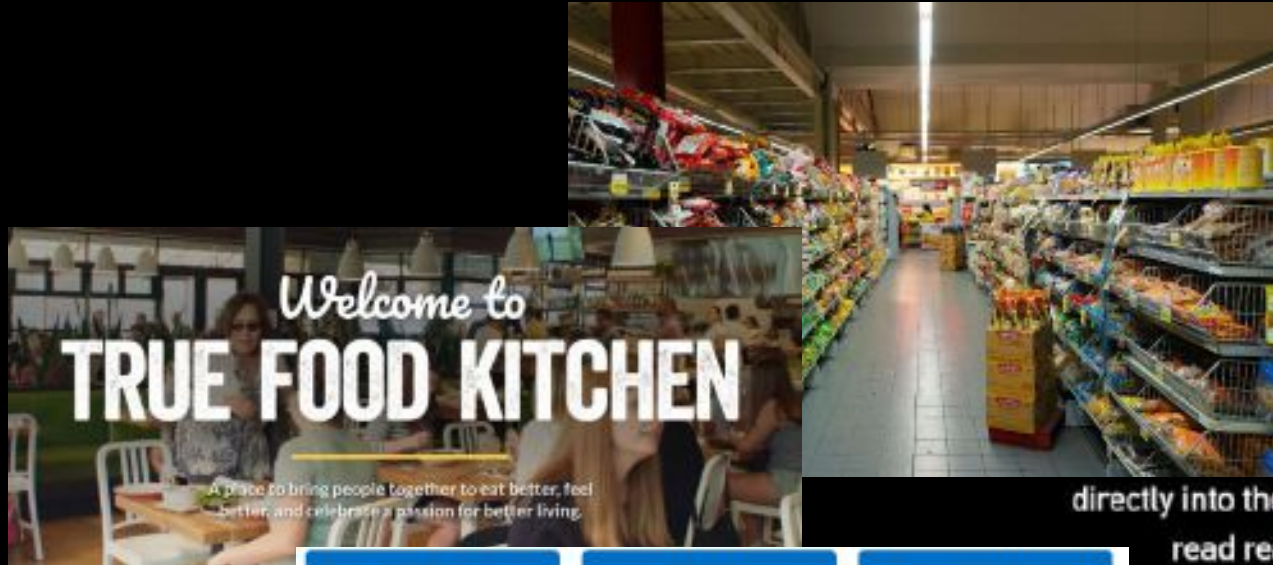


Photo by [Fikri Rasyid](#) on [Unsplash](#)

# Customer Communication is Changing

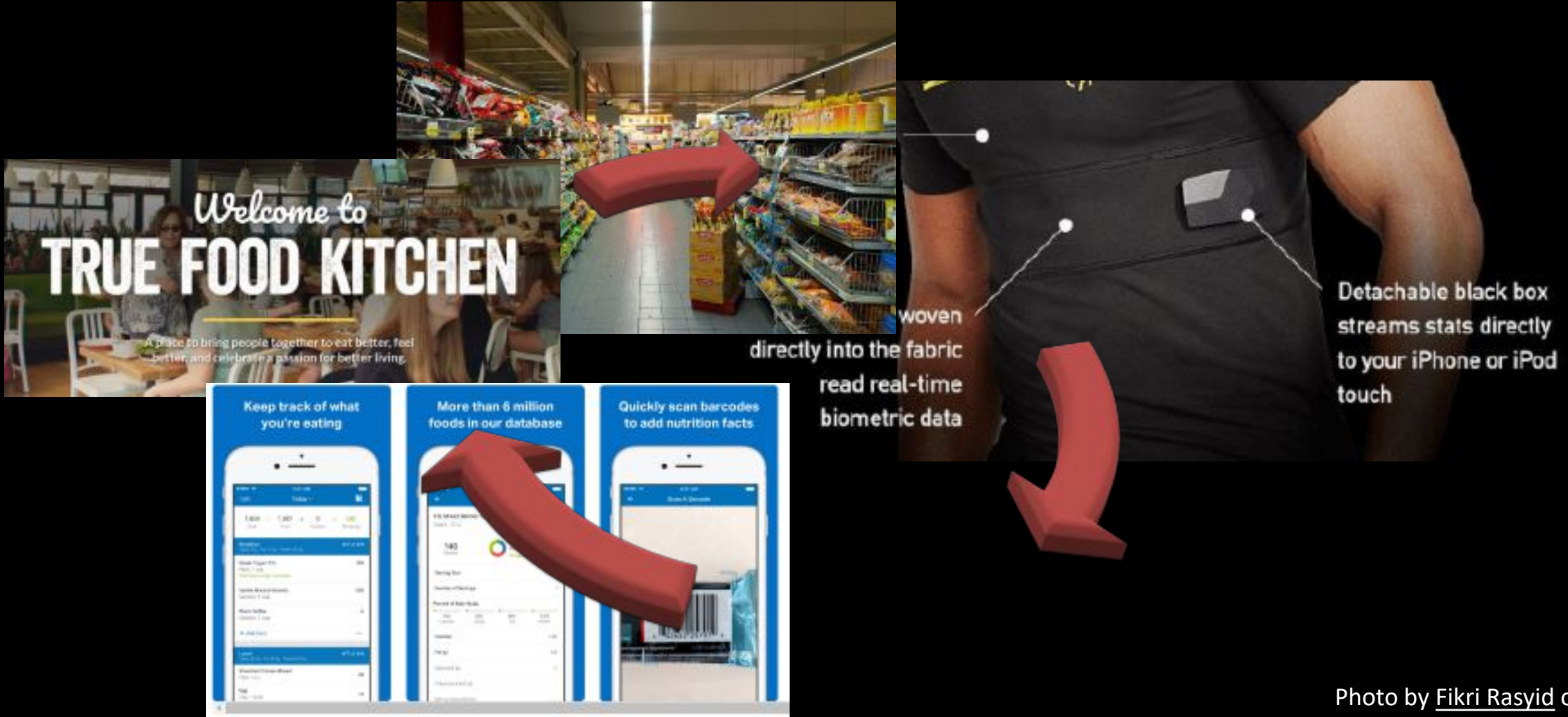


Photo by [Fikri Rasyid](#) on [Unsplash](#)



# Customer Communication is Changing



Photo by [Jose Soriano](#) on [Unsplash](#)

Photo by [Fikri Rasyid](#) on [Unsplash](#)

# Customer Communication is Changing



# Customer Communication is Changing





# Customer Communication is Changing

Because of LOTS of data

Optimize for Voice

Optimize for Augmented Reality

Optimize for Facial Recognition

Optimize for Vehicle

Optimize for Delivery

Optimize for Partnerships

# Customer Communication is Changing

Because of LOTS of data



Founded by industry veterans John Sculley and David Steinberg, Zeta Global helps customers like American Airlines, Toys R Us and Sprint manage their data and optimize digital communication. Insights are derived from the software company's database of more than 350 million people, and the company claims to have an average of 3,000 attributes per consumer.

Zeta Global aggregates data across channels, including mobile, social and email, to help its customers personalize brand communication with more relevant offers and ads. The company then tracks how people interact with the advertisements to help improve future communications with the help of machine-learning algorithms.

# A Customer Data Taxonomy

## Who They Are

### What They Did

Name	Education
Gender	Career
Age	Criminal Record
Race	Press exposure
Address	Publications
Phone	Awards
Fingerprint	Associations
Heart Rate	Credit score
Weight	Legal matters
Device	Loans
Gov ID	Divorce
etc.	etc.

## What They Like

Preferences
Settings
Avocations
Political Party
Social Groups
Social Likes
Entertainment
Hobbies
News feeds
Browser history
Brand affinity
etc.

### What They Have

Income
Home
Cars
Devices
Clothing
Jewelry
Investments
Subscriptions
Memberships
Collections
Relationships
etc.

## What They Do

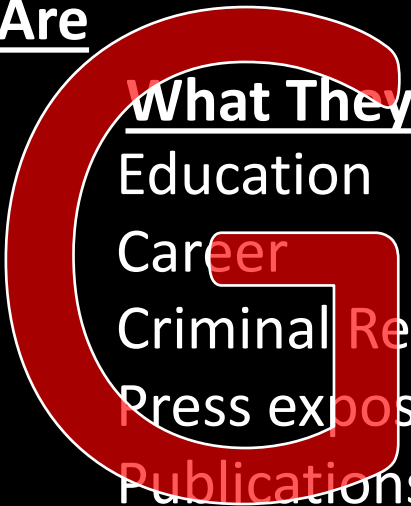
### How They Feel

Keystrokes	Religion
Gestures	Values
Gaze	Donations
Day part	Political party
Location	Skeptic/Altruism
IP address	Intro/Extrovert
Social posts	Liberal/Conserv.
Dining out	Flexible/Inflexible
Purchases	Aggress./Passive
TV viewing	Opinion
Travel	Mood
etc.	etc.

# A Customer Data Taxonomy

## Who They Are

Name  
Gender  
Age  
Race  
Address  
Phone  
Fingerprint  
Heart Rate  
Weight  
Device  
Gov ID  
etc.



## What They Did

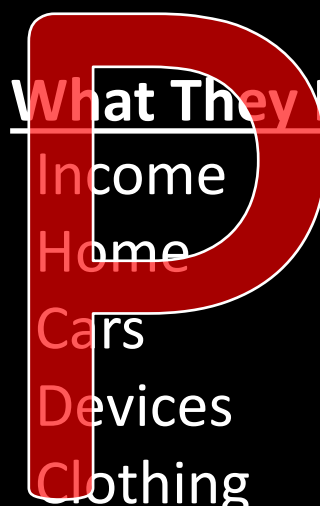
Education  
Career  
Criminal Record  
Press exposure  
Publications  
Awards  
Associations  
Credit score  
Legal matters  
Loans  
Divorce  
etc.

## What They Like



Preferences  
Settings  
Avocations  
Political Party  
Social Groups  
Social Likes  
Entertainment  
Hobbies  
News feeds  
Browser history  
Brand affinity  
etc.

## What They Have



Income  
Home  
Cars  
Devices  
Clothing  
Jewelry  
Investments  
Subscriptions  
Memberships  
Collections  
Relationships  
etc.

## What They Do



Keystrokes  
Gestures  
Gaze  
Day part  
Location  
IP address  
Social posts  
Dining out  
Purchases  
TV viewing  
Travel  
etc.

## How They Feel

Religion  
Values  
Donations  
Political party  
Skeptic/Altruism  
Intro/Extrovert  
Liberal/Conserv.  
Flexible/Inflexible  
Aggress./Passive  
Opinion  
Mood  
etc.

# Customer Communication is Changing

Optimize for Voice

Optimize for Augmented Reality

Optimize for Facial Recognition

Optimize for Vehicle

Optimize for Delivery

Optimize for Partnerships

# Customer Communication is Changing

Optimize for Voice

Optimize for Augmented Reality

Optimize for Facial Recognition

Optimize for Vehicle

Optimize for Delivery

Optimize for Partnerships

Optimize for C2B Bot Negotiation



# C2B Bot Negotiation

Premise: Customers Own Their Own Data

# United Nations Declaration of Human Rights



## THE UNIVERSAL DECLARATION OF Human Rights

1948

**PREAMBLE** Recognition of the inherent dignity and of the equal and inalienable rights of all members of the human family is the foundation of freedom, justice and peace in the world.

**PREAMBLE** Disregard and contempt for human rights have resulted in barbarous acts which have outraged the conscience of mankind, and the advent of a world in which human beings shall enjoy freedom of speech and belief and freedom from fear and want has been proclaimed as the highest aspiration of the common people.

**PREAMBLE** It is essential, if man is not to be compelled to live in fear, as a last resort, to rebellion against tyranny and oppression, that human rights should be protected by the rule of law.

**PREAMBLE** It is essential to promote the development of friendly relations among nations.

**PREAMBLE** The people of the United Nations have in the Charter reaffirmed their faith in fundamental human rights, in the dignity and worth of the human person and in the equal rights of men and women and have

determined to promote social progress and better standards of life in larger freedom.

**PREAMBLE** Member States have pledged themselves to achieve, in co-operation with the United Nations, the promotion of universal respect for and observance of human rights and fundamental freedoms.

**PREAMBLE** A common understanding of these rights and freedoms is of the greatest importance for the full realization of this pledge.

**ARTICLE 1** **THE GENERAL PRINCIPLE**  
All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act towards one another in a spirit of brotherhood.

**ARTICLE 1** — All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act towards one another in a spirit of brotherhood.

**ARTICLE 2** — 1. Everyone is entitled to all the rights and freedoms set forth in this Declaration, without distinction of any kind, such as race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status.

2. Furthermore, no distinction shall be made on the basis of the political, jurisdictional or international status of the country or territory to which a person belongs, whether that country be an independent, trust or non-self-governing territory, or under any other limitation of sovereignty.

**ARTICLE 3** — Everyone has the right to life, liberty and the security of person.

**ARTICLE 4** — No one shall be held in slavery or servitude; slavery and the slave trade shall be prohibited in all their forms.

**ARTICLE 5** — No one shall be subjected to torture

**ARTICLE 6** — 1. Everyone has the right to seek and to enjoy in other countries asylum from persecution.

2. This right may not be invoked in the case of prosecution genuinely arising from non-political crimes or from acts contrary to the purposes and principles of the United Nations.

**ARTICLE 7** — 1. Everyone has the right to a nationality.

2. No one shall be arbitrarily deprived of his nationality nor of the right to change his nationality.

**ARTICLE 8** — 1. Men and women of full age, without any limitation of race, colour, nationality, religion, shall have the right to marry and to found a family. They are entitled to equal rights in marriage, during marriage and at its dissolution.

2. Marriage shall be entered into only with the free and full consent of the intending spouses.

3. The family is the natural and fundamental group unit of society and is entitled to protection by society and the State.

**ARTICLE 9** — 1. Everyone has the right to own property alone

or in holding by himself, and his family, an individual or a collective title of ownership of human dignity and fundamental freedoms, by other means of social organization.

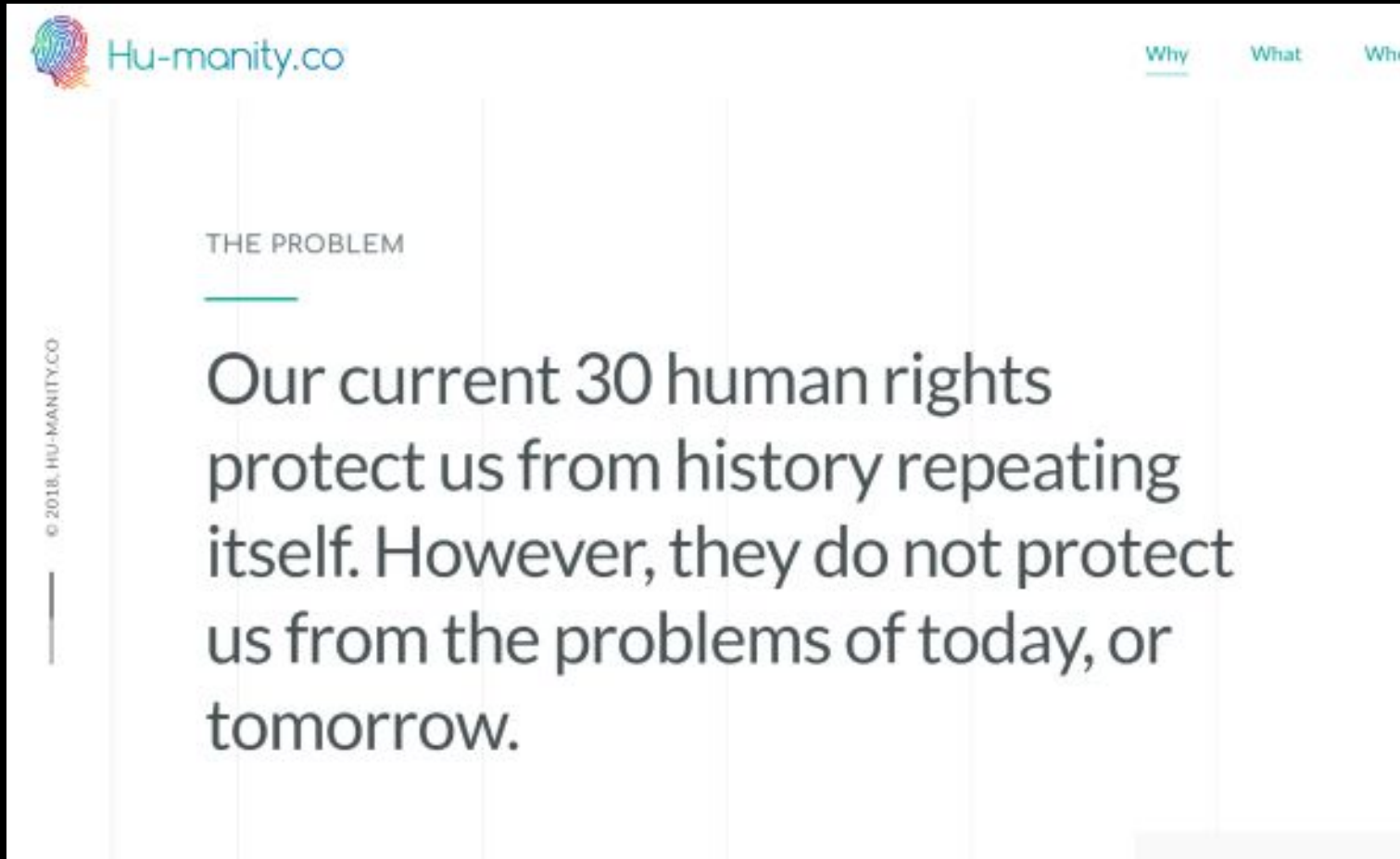
**ARTICLE 10** — Everyone has the right to a fair and public hearing by the competent authorities for the protection of his interests.

**ARTICLE 11** — 1. Everyone has the right to a fair and public hearing by the competent authorities for the protection of his interests.

**ARTICLE 12** — 1. Everyone has the right to be respected for his privacy, family, home and correspondence, and to be protected against arbitrary or unlawful interference with his privacy, family, home and correspondence.

2. Protection of the family, home and correspondence shall imply the same social protection.

# United Nations Declaration of Human Rights



The screenshot shows the top of the Hu-manity.co website. The logo is a colorful brain icon next to the text 'Hu-manity.co'. To the right are three navigation links: 'Why', 'What', and 'Who'. Below the navigation is a section titled 'THE PROBLEM' with a teal underline. The main text reads: 'Our current 30 human rights protect us from history repeating itself. However, they do not protect us from the problems of today, or tomorrow.' On the left side of the page, there is a vertical copyright notice: '© 2018, HU-MANITY.CO'.

2019

# United Nations Declaration of Human Rights



#31 ``Everyone has the right to legal ownership of their inherent human data as property``

2019

© 2018. HU-MANITY.CO

Our current 30 human rights protect us from history repeating itself. However, they do not protect us from the problems of today, or tomorrow.

# C2B Bot Negotiation

Premise: Customers Own Their Own Data

## How?



Vendor  
Relationship  
Management

# C2B Bot Negotiation

Premise: Customers Own Their Own Data

DNS for identity

Distributed services (respect network)

Transaction auditability



Vendor  
Relationship  
Management



# C2B Bot Negotiation

Premise: Customers Own Their Own Data

DNS for identity

Distributed services (respect network)

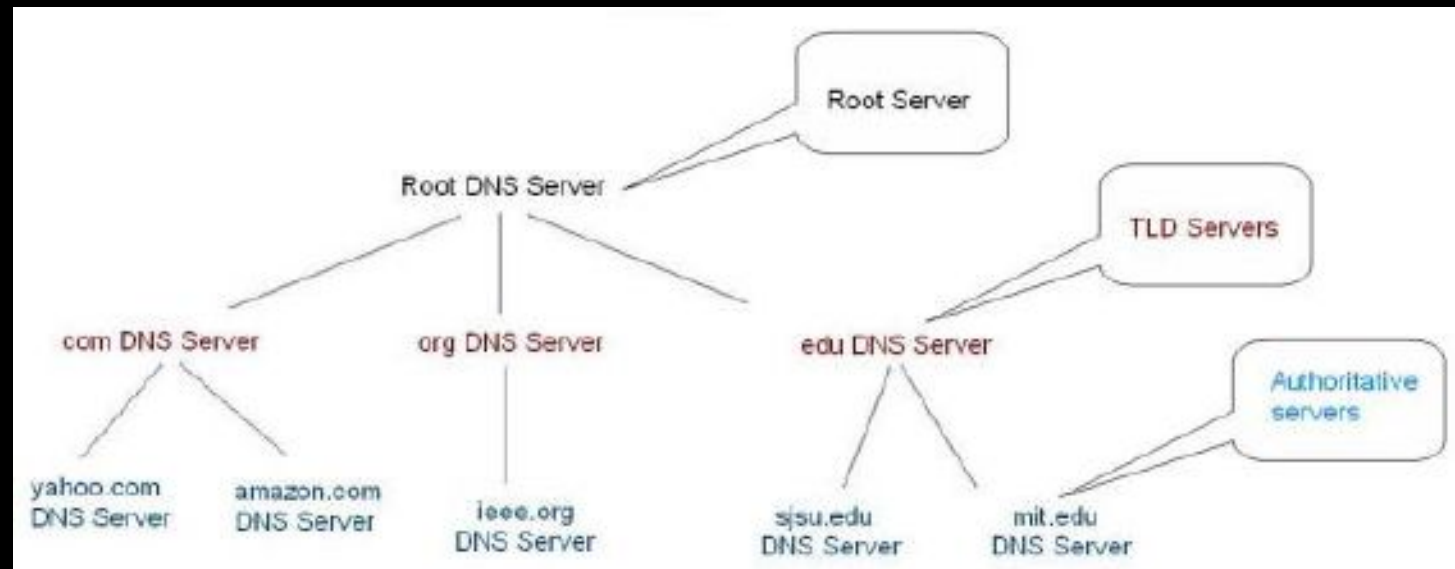
Transaction auditability



Vendor  
Relationship  
Management



Internet Corporation for  
Assigned Names and Numbers



# C2B Bot Negotiation

Premise: Customers Own Their Own Data

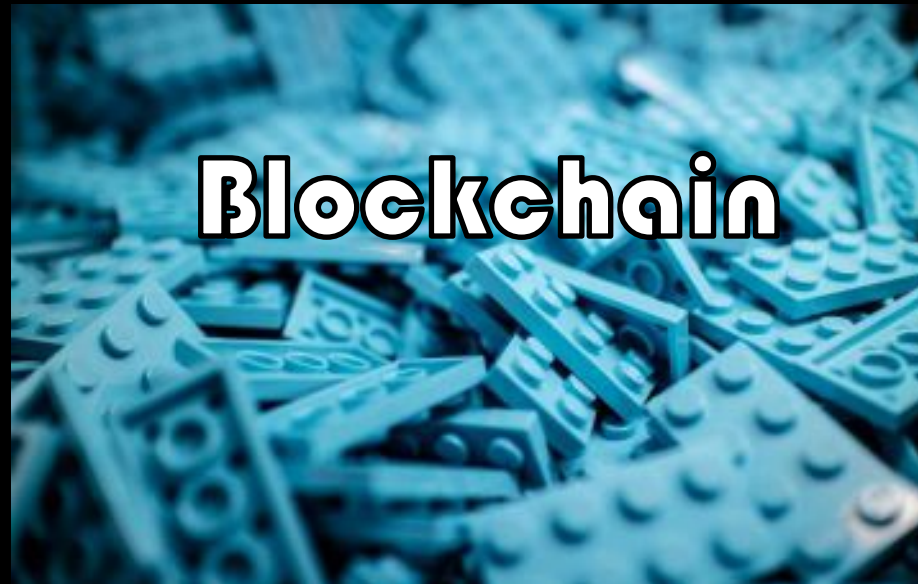
DNS for identity

Distributed services (respect network)

Transaction auditability



Internet Corporation for  
Assigned Names and Numbers



Vendor  
Relationship  
Management

Distributed  
Secure  
Auditable  
Trustworthy

Photo by [Iker Urteaga](#) on [Unsplash](#)

# C2B Bot Negotiation

Premise: Customers Own Their Own Data

# C2B Bot Negotiation

Premise: Customers Own Their Own Data  
Customers Store Their Own Data

# C2B Bot Negotiation

Premise: Customers Own Their Own Data  
Customers Store Their Own Data

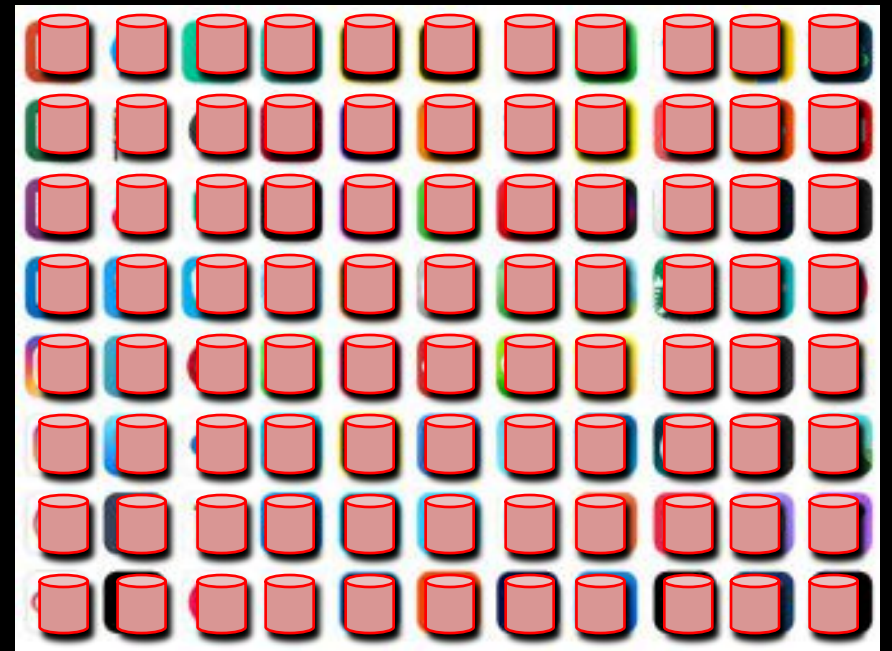
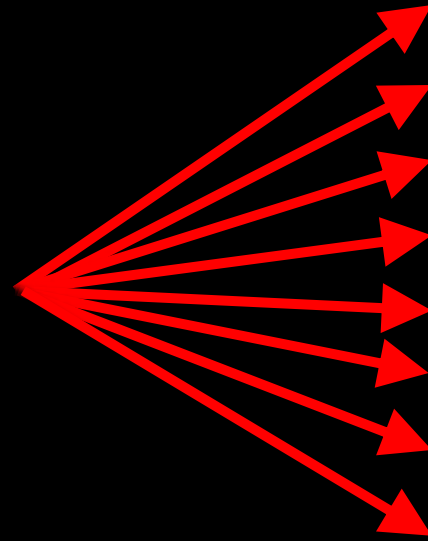


Photo by [Joseph Gruenthal](#) on [Unsplash](#)



# C2B Bot Negotiation

Premise: Customers Own Their Own Data  
Customers Store Their Own Data

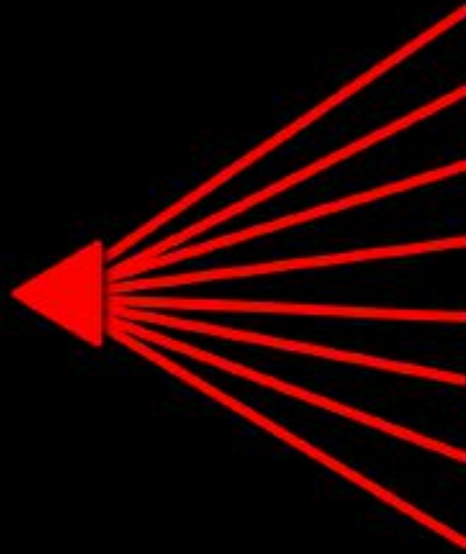


Photo by [Joseph Gruenthal](#) on [Unsplash](#)



# C2B Bot Negotiation

Premise: Customers Own Their Own Data  
Customers Store Their Own Data

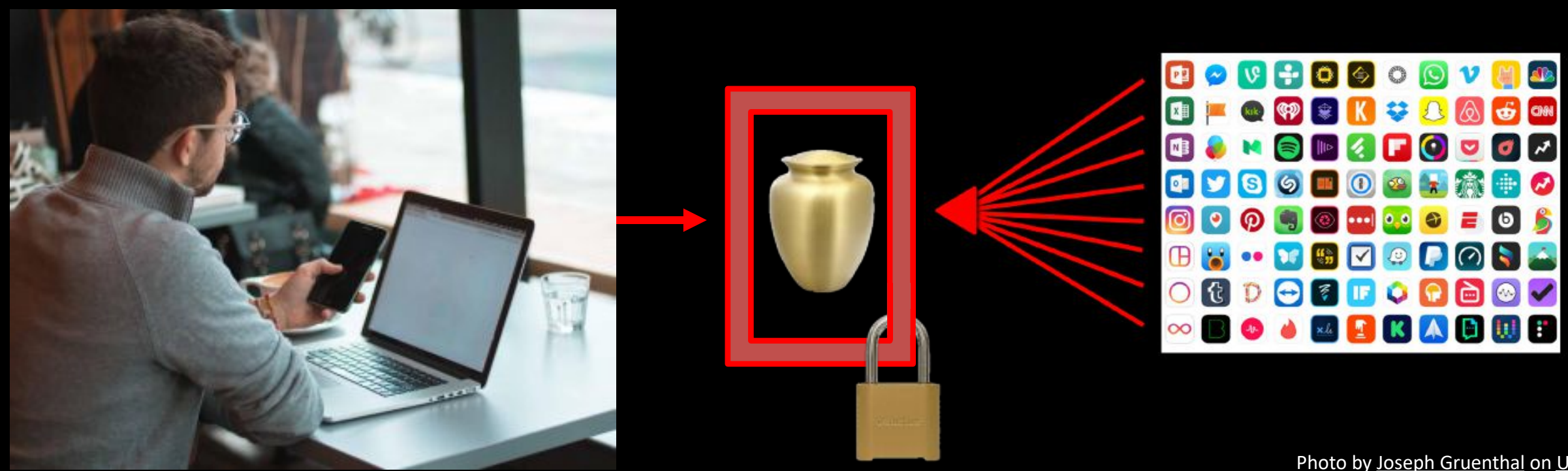


Photo by [Joseph Gruenthal](#) on [Unsplash](#)

# C2B Bot Negotiation

Premise: Customers Own Their Own Data  
Customers Store Their Own Data

## Trustworthy?



[solid.inrupt.com](http://solid.inrupt.com)

You decide where to store your data POD  
Separate from apps so free to move at any time  
You give people and apps permission to read or write  
Data saved by one app available in another  
All data in sync, always

# C2B Bot Negotiation

Premise: Customer  
Customer

Trustworthy?



solid.inrupt.com



# C2B Bot Negotiation

**MAD** LONDON

AROUND THE NET

## Tim Berners-Lee Warns Of 'Nastiness And Misinformation' Spreading

BBC, Tuesday, March 12, 2019 9:14 AM



**CSO**  
FROM CIO

CSO Events

Resources/Whitepapers

Opinions

Blogs

CSOM

CISO Leaders

## Tim Berners-Lee: Sick web needs saving from companies and governments

Liam Tung (CSO Online) on 13 March, 2019 07:25



**Tim Berners-Lee** ✓

@timberners\_lee

Director of the World Wide Web Consortium (W3C) w3.org, the place to agree on web standards. Founded webfoundation.org - let the web serve humanity



# C2B Bot Negotiation

Premise: Customers Own Their Own Data  
Customers Store Their Own Data

Trustworthy



[solid.inrupt.com](https://solid.inrupt.com)

You decide where to store your data  
Separate from apps so free to move  
You give people and apps permissions  
Data saved by one app available in others  
All data in sync, always



# C2B Bot Negotiation

Premise: Customers Own Their Own Data  
Customers Store Their Own Data



# C2B Bot Negotiation

Premise: Customers Own Their Own Data  
Customers Store Their Own Data  
Customers Want Their Own Data

# Nobody (but Sir Tim) is Trustworthy

## Facebook may be facing a “record” fine from the FTC. Here’s why.

Cambridge Analytica is still causing headaches for Facebook.

By Kurt Wagner | Jan 23, 2019, 6:00am EST

## Social networks put your privacy at risk, even when you don’t have an account

By Olivia Goldhill + January 25, 2019

## Google hit with £44m GDPR fine over ads

By Chris Fox  
Technology reporter

🕒 21 January 2019

     Share

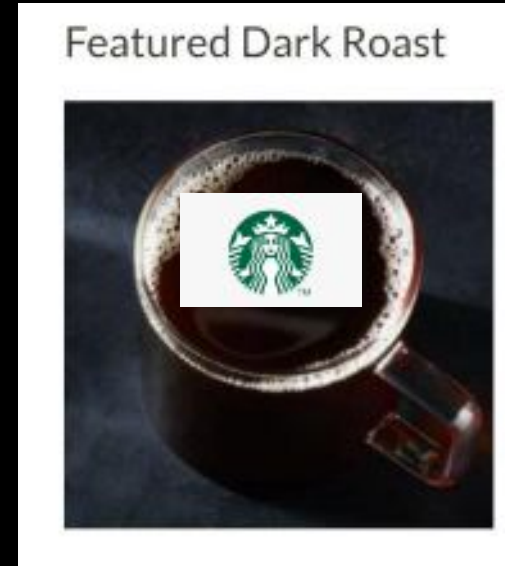
# C2B Bot Negotiation

Premise: Customers Own Their Own Data  
Customers Store Their Own Data  
Customers Want Their Own Data  
Nobody is Trustworthy  
Convenience

# Convenience



2 lbs =  
80 ea, 12oz cups =  
12.5¢ per cup



"Tall" =  
1 ea, 12oz cup =  
\$1.85 per cup

15  
times  
More  
\$\$\$

# Convenience

## Shopping List

AA batteries

Dry cleaner

Car wash

Trash bags

Groceries

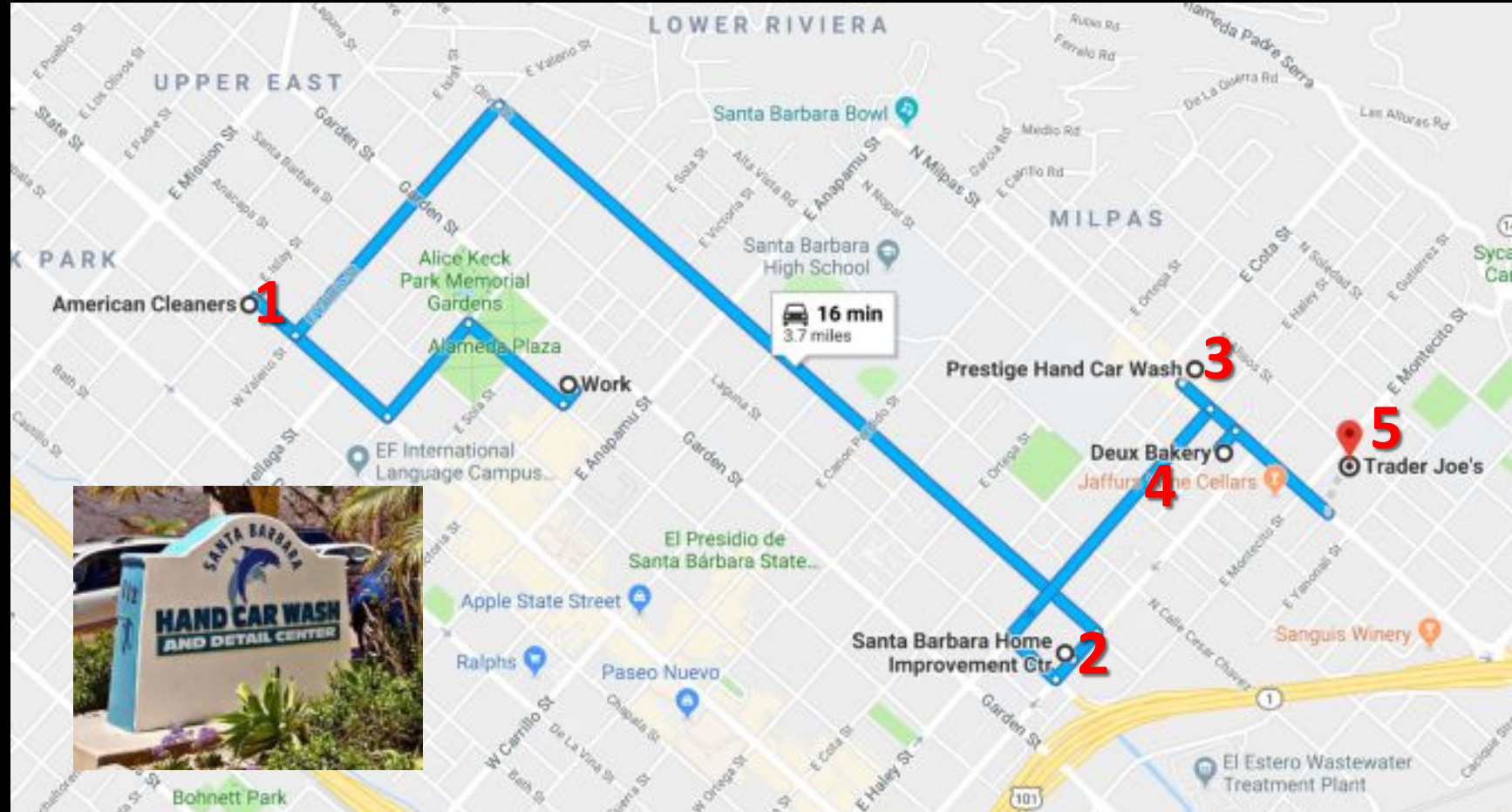
Bakery

Light bulbs

# Convenience

## Shopping List

- 2 AA batteries
- 1 Dry cleaner
- 3 Car wash
- 2 Trash bags
- 5 Groceries
- 4 Bakery
- 2 Light bulbs

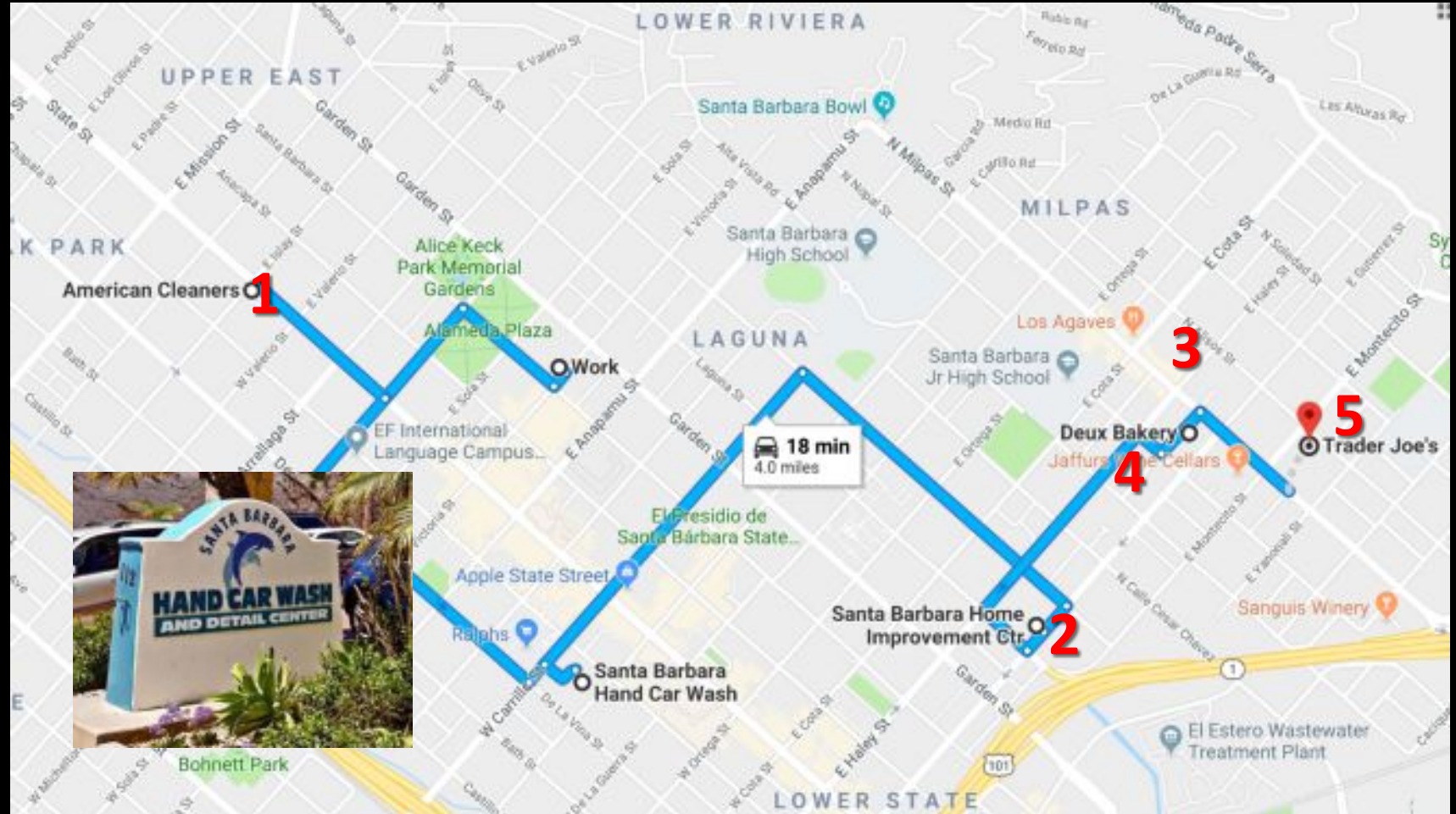




# Convenience

## Shopping List

- 2 AA batteries
- 1 Dry cleaner
- 3 Car wash
- 2 Trash bags
- 5 Groceries
- 4 Bakery
- 2 Light bulbs



# C2B Bot Negotiation

Premise: Customers Own Their Own Data

Customers Store Their Own Data

Customers Want Their Own Data

Nobody is Trustworthy

Convenience

The ultimate convenience is having to do *nothing*.

- Jonathan Yarmis, The Skills Connection

# Convenience



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# Convenience



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# C2B Bot Negotiation

Premise: Customers Own Their Own Data  
Customers Store Their Own Data  
Customers Want Their Own Data

# C2B Bot Negotiation

Premise: Customers Own Their Own Data  
Customers Store Their Own Data  
Customers Want Their Own Data  
Customers Run Their Own Agents



# Customers Run Their Own Agents

My Personal Agent is mine / for me (not GAFTA, etc.)

Knows all about me (protected data)

Grants degrees of data access (circles of trust)

Proactive



MY MAN JEEVES

P.G. WODEHOUSE

WORLD CLASSICS IN LARGE PRINT



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WORLD CLASSICS IN LARGE PRINT

# Customers Run Their Own Agents

My Personal Agent is mine / for me (not GAFTA, etc.)

Knows all about me (protected data)

Grants degrees of data access (circles of trust)

Proactive

# Convenience



Dishwasher fail in 30 days at 90%  
12 models fit kitchen dimensions  
4 models fit kitchen style  
2 models fit budget  
1 model fits schedule  
Negotiated best price  
Install Wednesday?

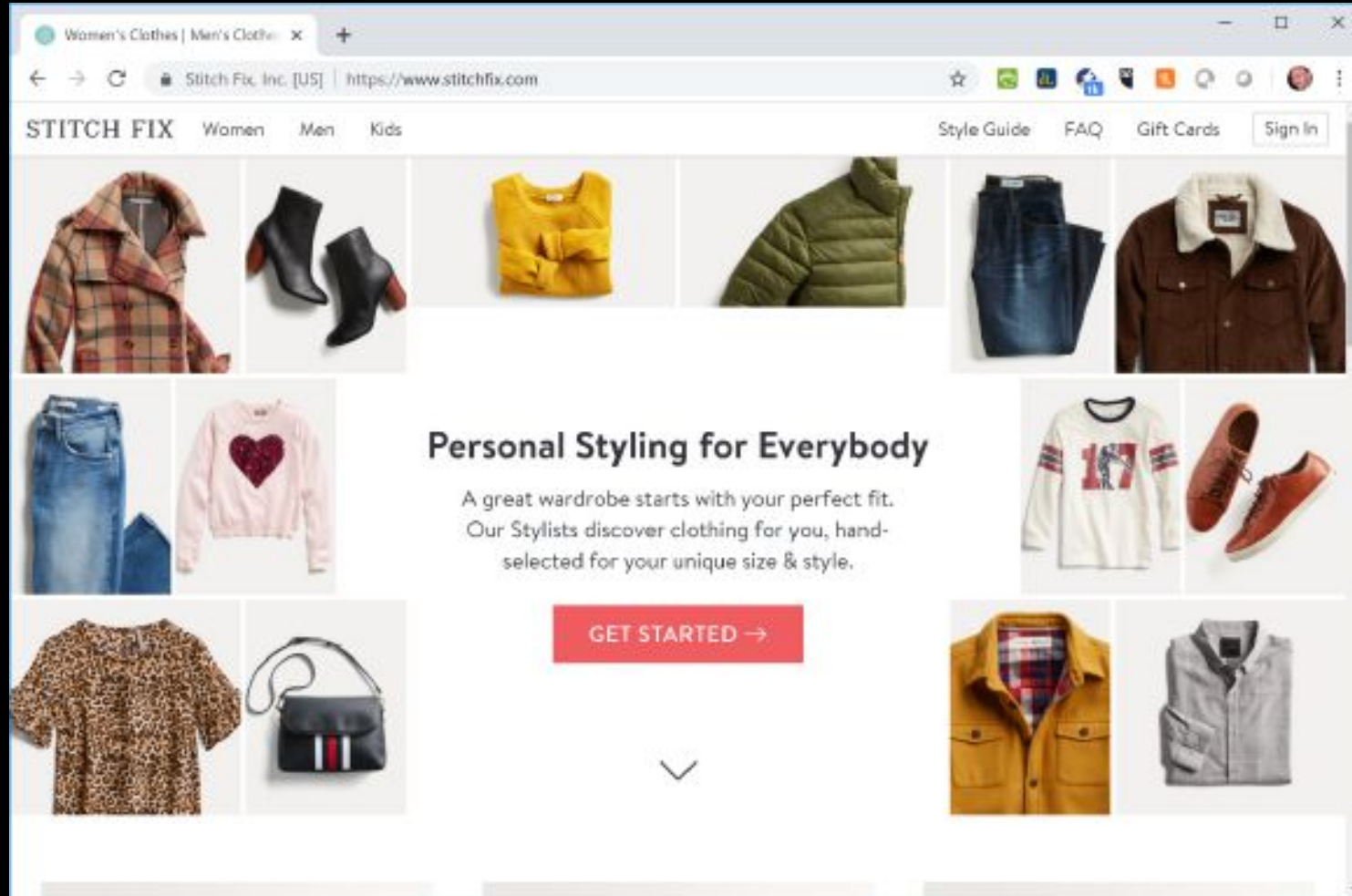
OK?

Not yet

Photo by [Lucas Benjamin](#) on [Unsplash](#)

Photo by [Rock'n Roll Monkey](#) on [Unsplash](#)

# Convenience



# Convenience

The screenshot displays the Amazon.com homepage for a user named Jim. At the top, the Amazon Prime logo is visible on the left, and the search bar is in the center. On the right, there are links for "Watch & love Prime Video", "Hello, Jim", "Account & Lists", "Orders", "Prime", and a shopping cart icon. Below the navigation bar, a horizontal menu includes "Your Amazon.com", "Your Browsing History", "Recommended For You", "Improve Your Recommendations", "Your Profile", and "Learn More".

The main content area is titled "Recommended for you, Jim" and features a grid of eight recommendation tiles:

- Painting, Drawing & Art Supplies** (28 ITEMS): A box of Crayola Ultra-Clean Washable Markers.
- Gourmet Gifts** (5 ITEMS): A collection of gourmet gift boxes, including one with a chocolate bunny.
- Men's Apparel** (100 ITEMS): A pair of dark-colored socks.
- Foreign Language Books** (100 ITEMS): A book titled "ANDINA" by Martin Morales, featuring a colorful cover.
- Medical Books** (64 ITEMS): A book titled "MAMA'S LAST HUG" by Frans de Waal, featuring a close-up of a chimpanzee's face.
- Candy & Chocolate** (130 ITEMS): A collection of candy and chocolate products, including a large bag of Hershey's Kisses.
- Amazon Video - TV** (100 ITEMS): A TV show cover for "Broad City".
- Gluten-Free Foods** (16 ITEMS): A collection of gluten-free food products, including boxes of KIND bars.

# C2B Bot Negotiation

The ultimate convenience is having to do *nothing*.

- Jonathan Yarmis, The Skills Connection






# C2B Bot Negotiation



# C2B Bot Negotiation



# C2B Bot Negotiation

1.45 pm EXPO+ 


Room: Saal 1

**Keynote:**


**This Time, the Robots ARE Coming**

Jim Sterne has an impressive track record looking over the horizon and telling the rest of us what to expect. He wrote his first book, "World Web Marketing:" in 1995. He wrote "Web Metrics" in 2002, He wrote "Artificial Intelligence for Marketing" in 2017. This year, he explains how robots will help you do your job and how they will transform marketing forever. Your professional, digital agents can work by your side to get the right message to the right person at the right time. But soon, marketing as we know it will change forever. If you're in B2B or B2C and have learned to survive in a C2C world, get ready for C2B: where your customers' bots negotiate with your bots.

**Moderator:**

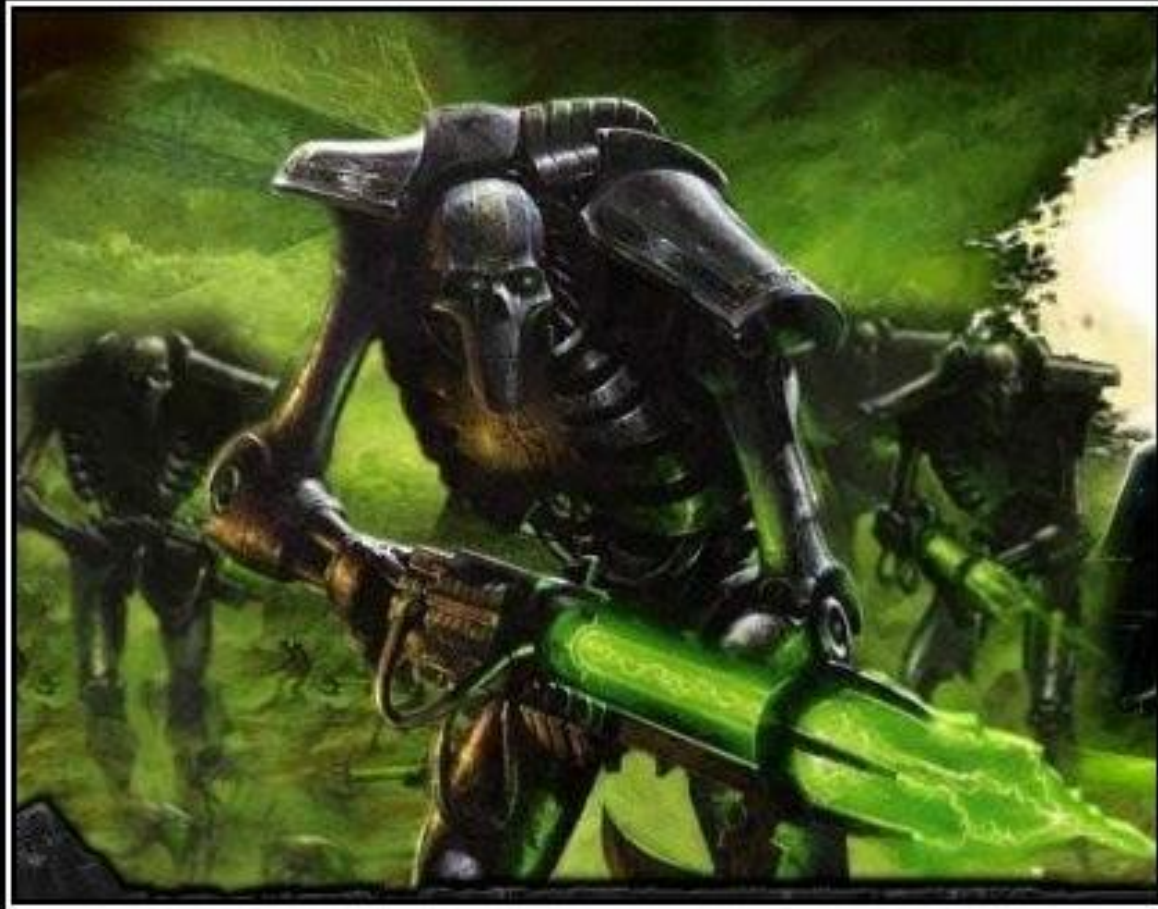
 **Alexander Holl**, CEO, 121WATT

**Speaker:**

 **Jim Sterne**, Co-Founder and Board Chair, Digital Analytics Association

2.30 pm **Session Change**





# ROBOT ZOMBIES WITH LAZERS

# Harness the Power for Yourself

Take advantage of the tools

Build your brand

Build systems to talk to customers' systems

# Your Advantages

Reason

Common sense

Empathy

Experience

Ability to relate unrelated info

Ability to onboard new ideas



# Your Job Will Always Be

Recognizing the problem

Deciding which data to consider

Evaluate the output



# Jim Sterne

## This Time, the Robots ARE Coming to Disrupt Marketing

