

Data storytelling

**The basics of turning data into
power**

**Dan Calacci, PhD student @ MIT
Media Lab**



A motivating example

MOTHERBOARD
TECH BY VICE

Target's Delivery App Workers to Be Paid by a Blackbox Algorithm Nationwide

members, and we believe that it's important that shopper pay reflects that.

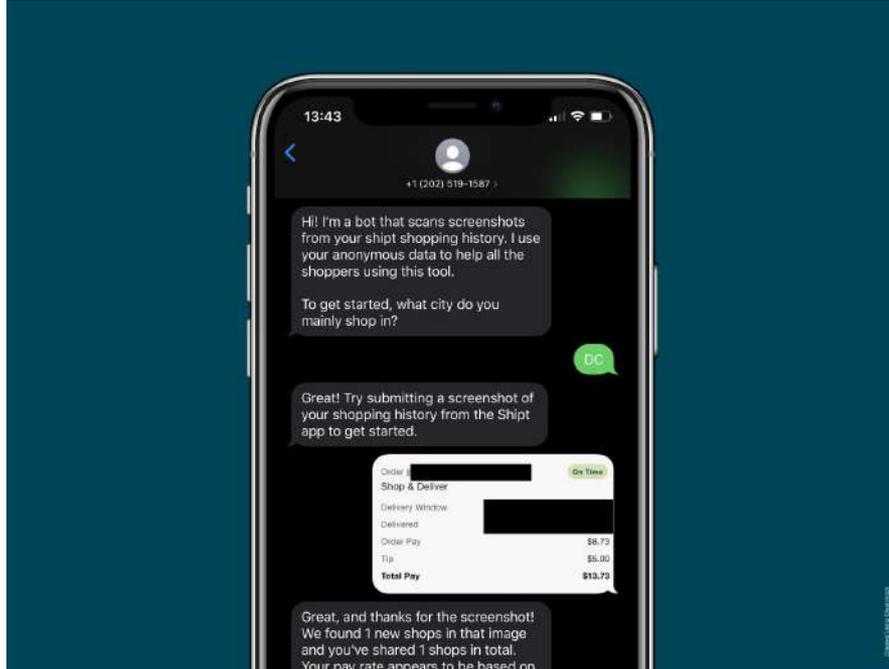
While this updated pay structure is in about 50 markets as of today, we anticipate that we will bring all markets on board in the coming months. We know many shoppers and members will have questions about these changes, and we hope the information below will help answer those questions and clarify some common misconceptions.

Some Shipt workers report seeing lower pay under new effort-based model

A group of Shipt shoppers is trying to organize a boycott of the platform this weekend

By Kim Lyons | Oct 16, 2020, 1:37pm EDT

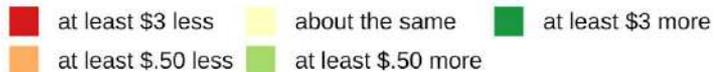
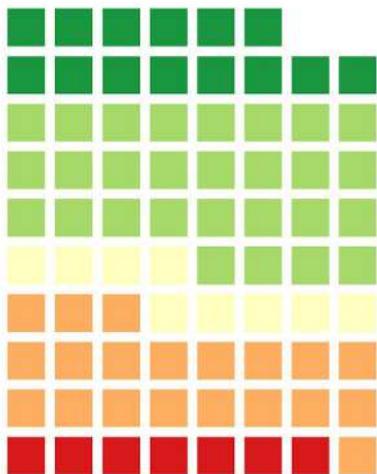
f t SHARE



03/25/2020	03/25/2020	02:11:52 PM	26.77	8.00	34.77
03/24/2020	03/24/2020	06:16:18 PM	22.22	5.00	27.22
03/29/2020	03/29/2020	02:54:47 PM	9.51	0.00	9.51
03/25/2020	03/25/2020	05:00:55 PM	14.33	0.00	14.33
03/31/2020	03/31/2020	02:28:29 PM	18.68	0.00	18.68
03/31/2020	03/31/2020	01:19:22 PM	11.73	7.33	19.06
03/24/2020	03/24/2020	05:27:57 PM	9.04	0.00	9.04
03/24/2020	03/24/2020	03:46:25 PM	23.38	6.99	30.37
03/25/2020	03/25/2020	04:00:11 PM	12.10	25.00	37.10
03/25/2020	03/25/2020	02:53:46 PM	6.75	0.00	6.75
04/05/2020	04/05/2020	01:31:59 PM	15.39	5.00	20.39
04/05/2020	04/05/2020	12:12:22 PM	18.00	0.00	18.00
04/05/2020	04/05/2020	12:03:02 PM	18.00	0.00	18.00
04/03/2020	04/03/2020	03:46:23 PM	31.26	20.00	51.26
			23.38	6.99	30.37
03/24/2020	03/24/2020	02:56:42 PM	8.68	0.00	8.68
03/24/2020	03/24/2020	12:50:09 PM	20.89	5.55	26.44
02/24/2020	02/24/2020	03:31:47 PM	11.83	5.16	16.99
02/24/2020	02/24/2020	01:19:28 PM	16.32	10.00	26.32
02/24/2020	02/24/2020	09:21:05 PM	18.55	0.00	18.55
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02/29/2020	02/29/2020	12:26:52 PM	9.80	5.00	14.80
02/28/2020	02/28/2020	04:03:16 PM	10.00	0.00	10.00
02/28/2020	02/28/2020	03:06:33 PM	13.00	0.00	13.00
02/28/2020	02/28/2020	02:19:43 PM	15.00	0.00	15.00
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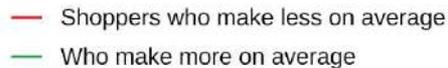
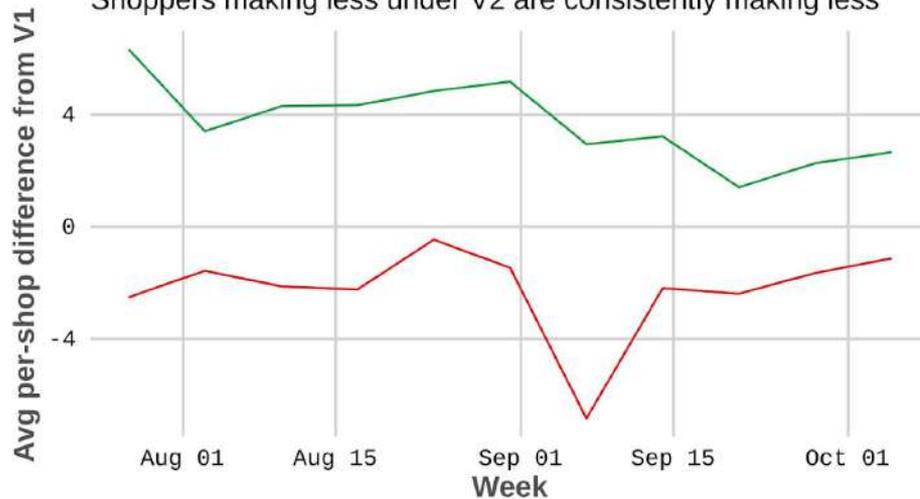
Overall pay change in V2

41% of shoppers are making less per-shop under V2 on average



Two classes of shoppers

Shoppers making less under V2 are consistently making less



Rage against Target's grip on algorithm

by Avi Asher-Schapiro | [@A](#)
Friday, 16 October 2020 13:10 GMT



GIZMODO | We come from
HOME LATEST REVIEWS TECH

TECH >> NEWS

Shipt's 'Effort- of Workers, Str

 Dharna Noor
10/15/20 12:00PM



WBRC FOX6 News  was live.

10m • 

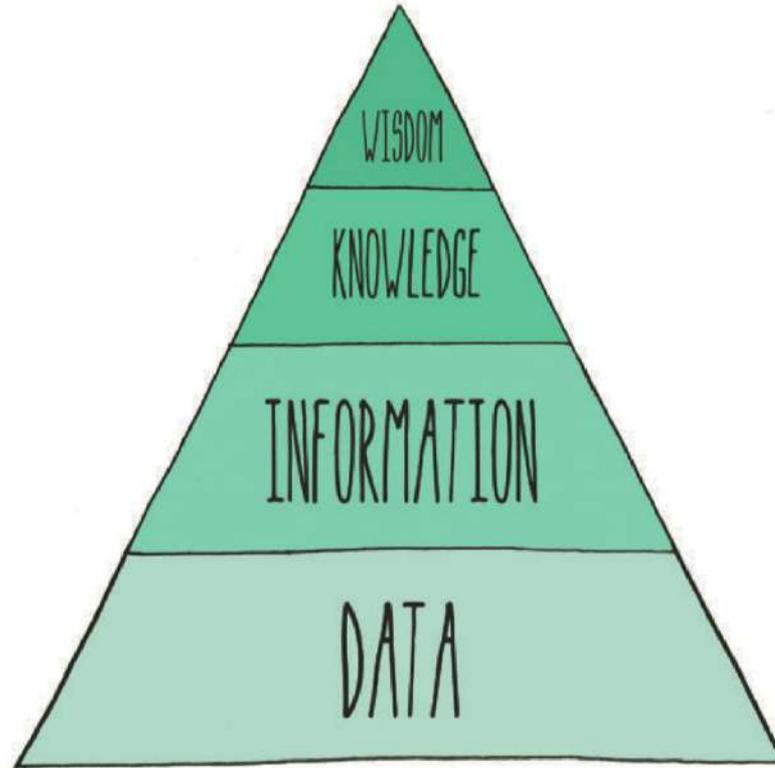
Shipt shoppers protesting over wages in downtown Birmingham.



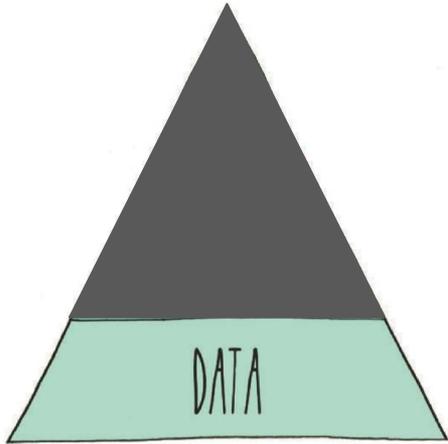
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Starting from the bottom-up



The Data



Order [#27852647](#) • \$124.37 On Time

Shop & Deliver

Delivery Window 01/21/2020: 4PM to 5PM

Delivered 01/21/2020, 04:19:13 PM

Order Pay \$14.58

Tip \$0.00

Total Pay \$14.58

Order [#27815758](#) • \$192.05 On Time

Shop & Deliver

Delivery Window 01/20/2020: 6PM to 7PM

Delivered 01/20/2020, 06:48:17 PM

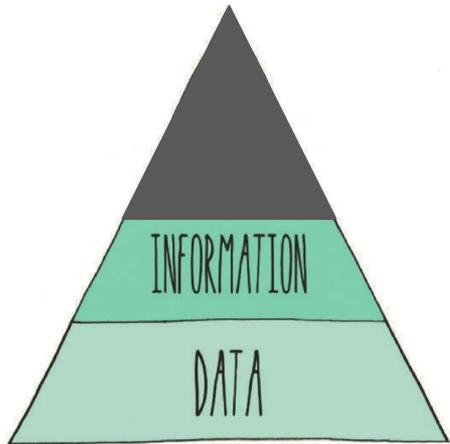
Order Pay \$19.40

Tip \$25.00

Total Pay \$44.40

Order [#27815943](#) • \$82.57 On Time

We Know What We're Looking For

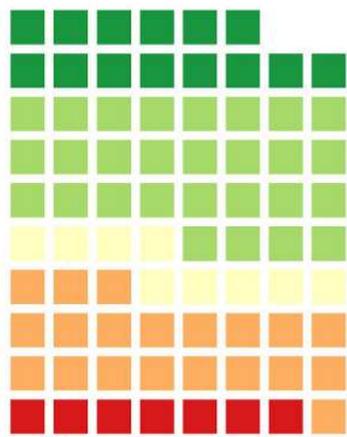


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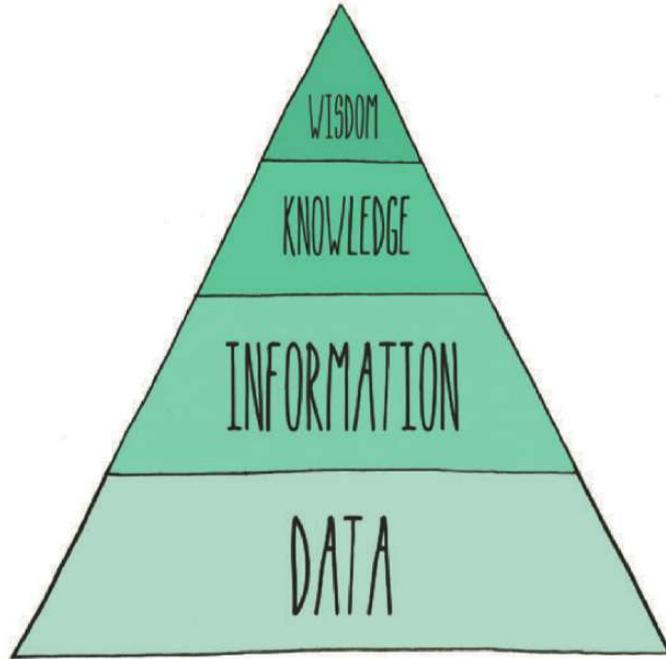


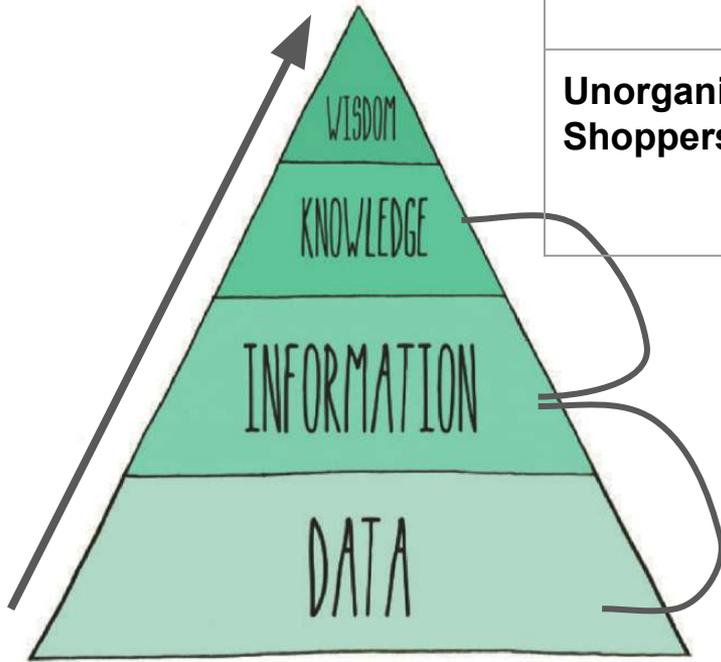
■ at least \$3 less
 ■ about the same
 ■ at least \$3 more
■ at least \$.50 less
 ■ at least \$.50 more

Two classes of shoppers

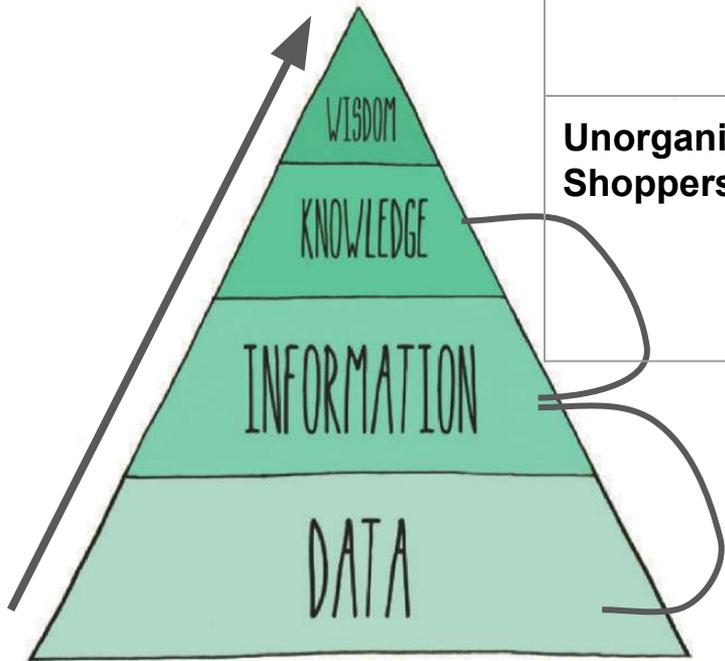
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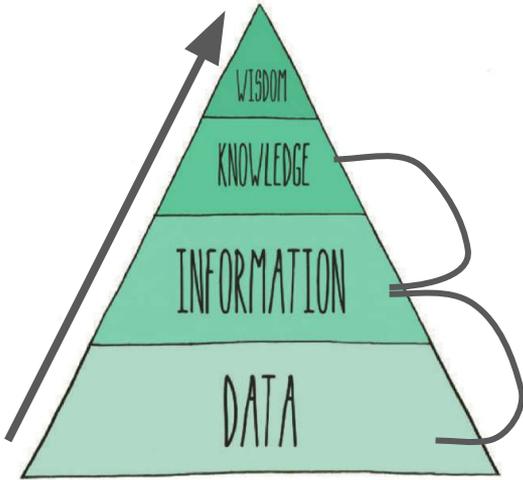


Audience	Think	Feel	Do
Journalists / Public	Shipt is employing opaque, unfair labor practices to its workers	Dutiful	Report on the pay cuts and worker stories that communicate their impact
Unorganized Shoppers			



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Unorganized Shoppers	Your employer is unfairly cutting others pay, and yours could be cut, too	Determined	Join other organized shoppers in sharing data and stories

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Unorganized Shoppers	Your employer is unfairly cutting others pay, and yours could be cut, too	Determined	Join other organized shoppers in sharing data and stories



Instead of aggregates, show portraits of single workers, of how their pay has changed and how it has impacted their livelihoods

Data: *Same data, different knowledge*

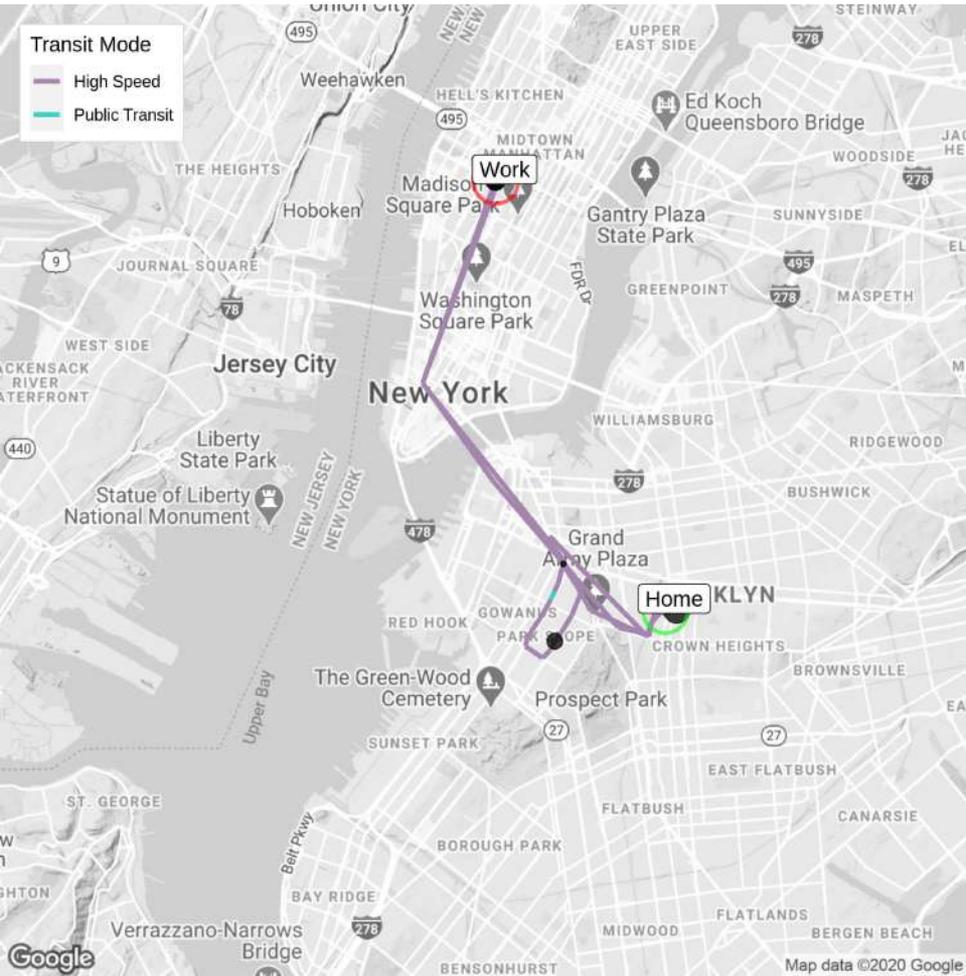
Focus more on who else has contributed where they are from, how many others you are joining by organizing

Data:

Locations of other shoppers (what city / community?)

Collect data on media traction (number of articles? Social media impact?)

Context Matters



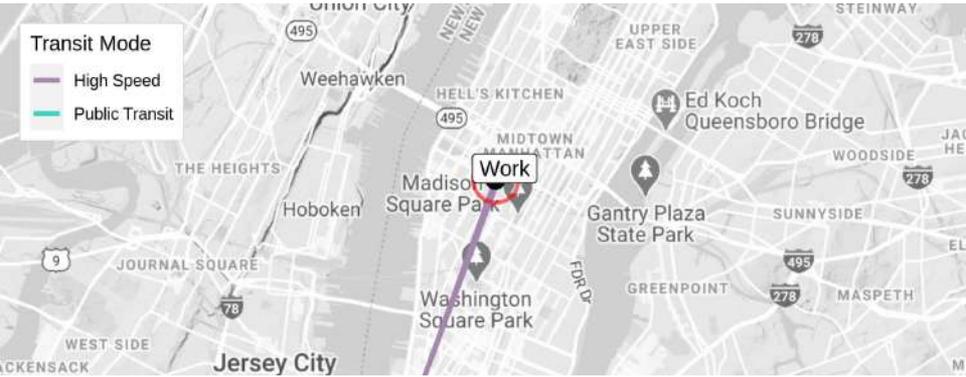
Data: GPS Traces for workers during the day

Information: Location, speed, mode of transit, where they spent time.

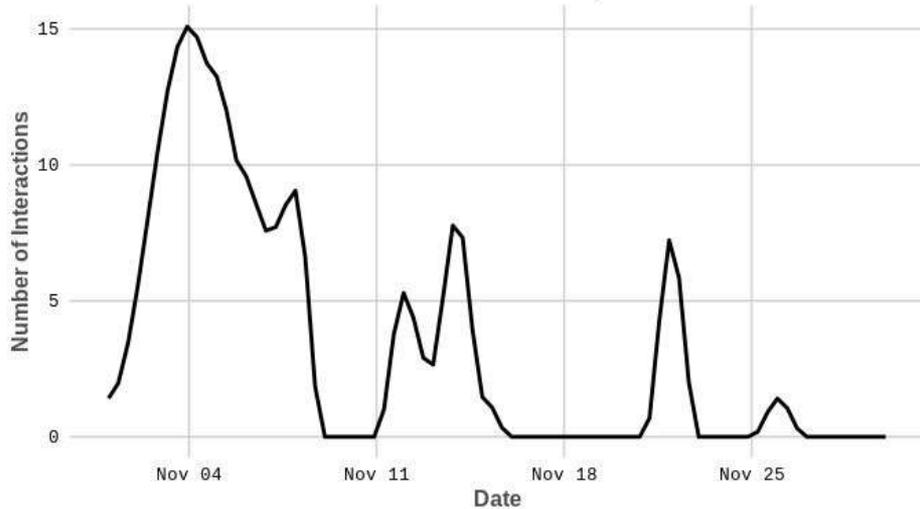
Knowledge:

- Their commuting path to work
- Real time spent at workplace
- Time spent on train vs car vs walking
- ???

Context Matters



Interactions under 6ft at the workplace



Data: GPS Traces for workers during the day

Information: Location, speed, mode of transit, where they spent time.

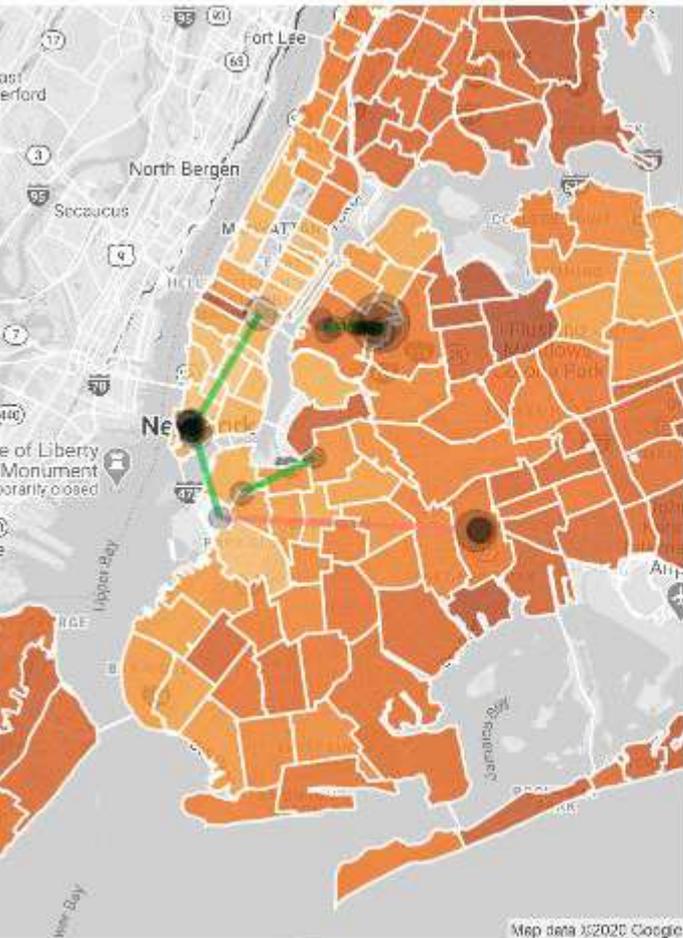
With Context:

- COVID-19 Safety

Knowledge:

- Number of Interactions under 6ft while at work

Context Matters



Data: GPS Traces for workers during the day

Information: Location, speed, mode of transit, where they spent time.

With Context:

- COVID-19 Safety

With Data: COVID case counts

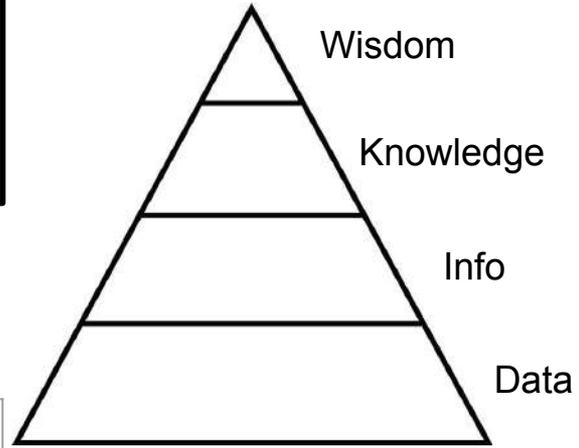
Knowledge:

- Relative covid risk
- Time spent on public transit in high-risk areas

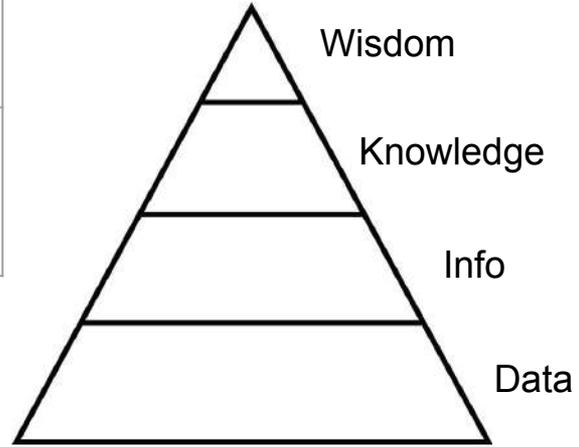
- 1. What data is available, or could be collected?**
- 2. What kinds of information can you create with that data?**
- 3. How can context, additional datasets, and experience turn that into knowledge?**

- 1. What audiences are you targeting?**
- 2. What do you want them to think?**
- 3. What do you want them to feel?**
- 4. What do you want them to do?**

Campaign Goals:

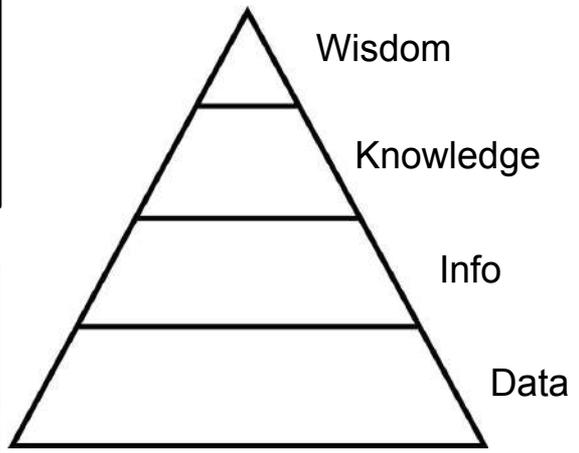


Audience	Think	Feel	Do



Campaign Goals: Win a union vote for graduate workers at my institute

Audience	Think	Feel	Do
Grad workers	Problems I've had in the institute could be fixed by a union if I helped get more people involved	Dutiful, Empowered	Organize colleagues for a card campaign



Campaign Goals: Win a union vote for graduate workers at my institute

Data Available: # of union members in each dept, # of grad workers in each dept, associated organizers, events they have attended

Data Collectable: Survey items on student experience, social network (who are you friends/ close with?),

