

26th Sep, 2024

Data democratisation - what could *possibly* go wrong?



deliveroo





On the menu today

**Deliveroo's data
ecosystem**



**Defining data
democracy**



**Lessons learnt on
data democratisation**



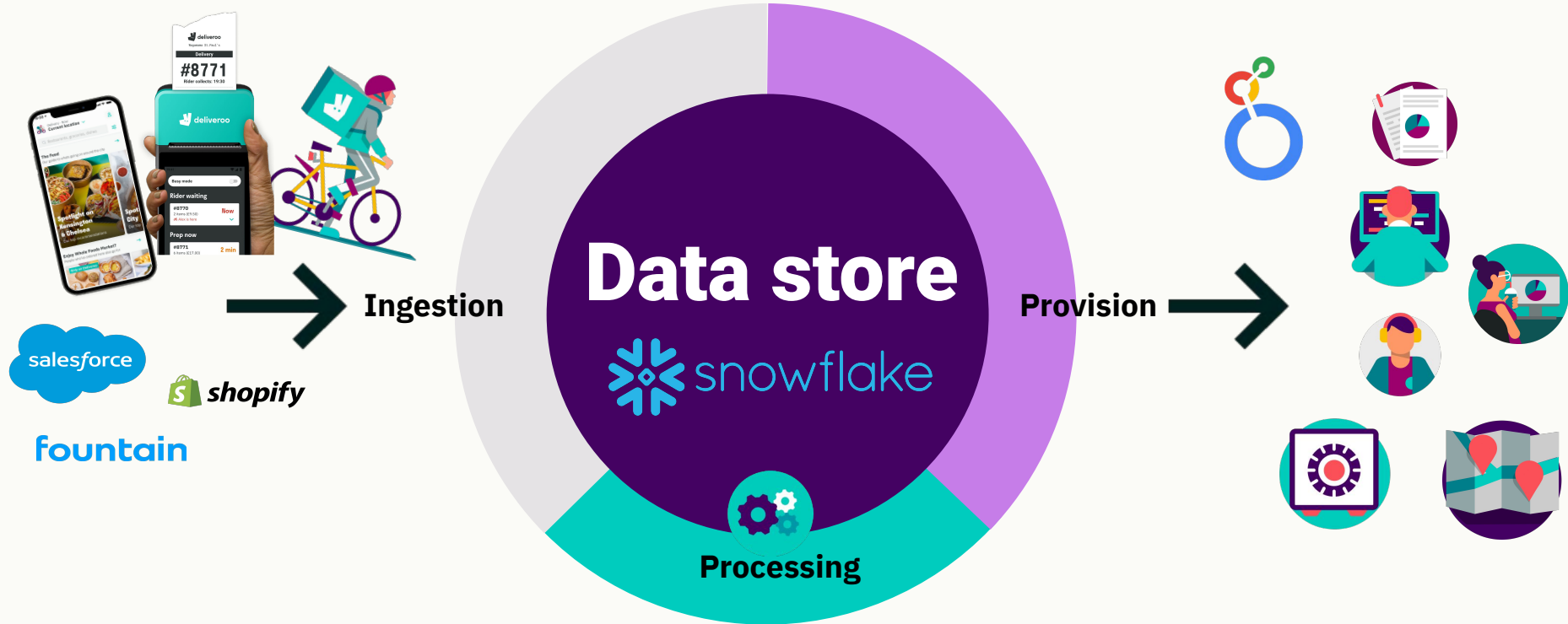
Deliveroo's data ecosystem

Our company mission

We transform the way you shop and eat, bringing the neighbourhood to your door by connecting customers, restaurants, shops and riders.



Deliveroo's data ecosystem



Defining data democracy

Defining data democracy



Data aristocracy

A select group of individuals control all data, with others dependent on them for insights



Defining data democracy



Data aristocracy

A select group of individuals control all data, with others dependent on them for insights



DATA
REVOLUTION



Data democracy

Everyone has direct access to the data and insights that benefit them in their job



"WITH GREAT DATA COMES GREAT
RESPONSIBILITY"



Lessons learnt on data democratisation



LESSON 1.
(DON'T FORGET TO)
INVEST IN
FOUNDATIONS EARLY

Invest in foundations early



Infrastructure teams

Establishing strong ownership of data infrastructure to ensure scalability and reliability is non-negotiable



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Safety

Data security and access management must be tight but also scalable (e.g. time based access)

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Infrastructure teams

Establishing strong ownership of data infrastructure to ensure scalability and reliability is non-negotiable

Budget

There is a monetary cost to having more users accessing more tools and data that require budget



Safety

Data security and access management must be tight but also scalable (e.g. time based access)

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There is a monetary cost to having more users accessing more tools and data that require budget



Safety

Data security and access management must be tight but also scalable (e.g. time based access)

Common language

Investment in data lineage and data cataloguing tools becomes a priority



LESSON 2

BEWARE OF

ANALYSIS-PARALYSIS

ANALYSIS - PARALYSIS IS..



1

.. believing that, with more data, exact answers are always **necessary**



ANALYSIS - PARALYSIS IS..

1 .. believing that, with more data, exact answers are always **necessary**

2 .. believing that, with more data, exact answers are always **possible**



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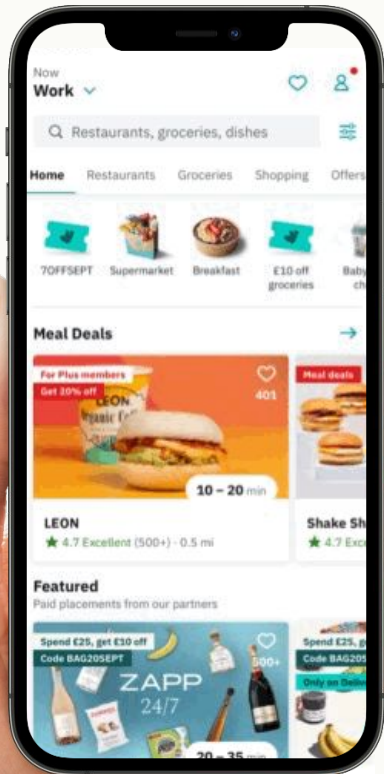
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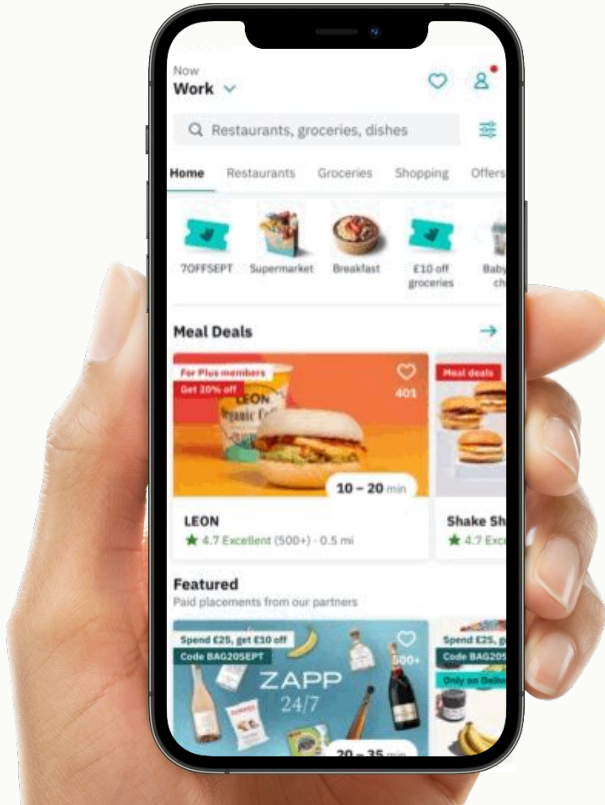


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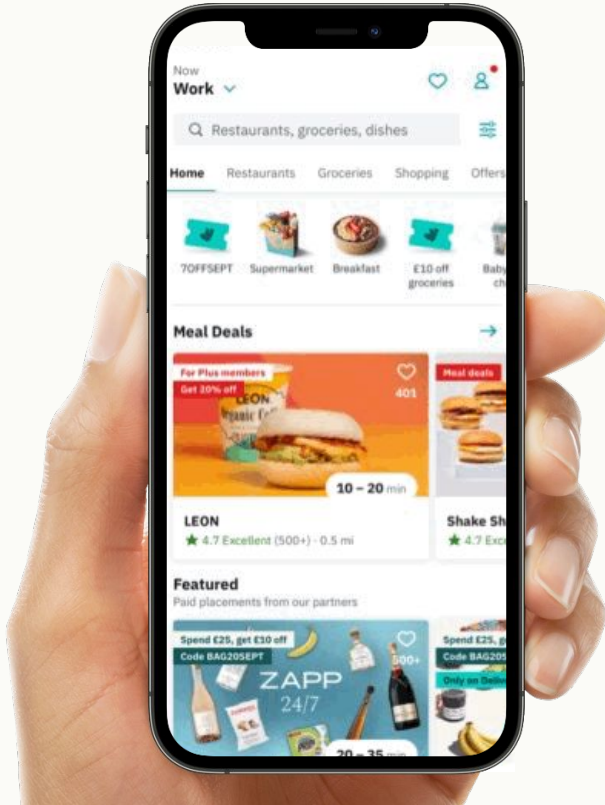
a case study from Deliveroo





BUSINESS QUESTION

How does available selection impact customer conversion?



BUSINESS QUESTION

How does available selection impact customer conversion?



FIRST ANSWER

More selection leads to higher conversion rates



Slido

Question: What, if any, confounding factors might be present in the relationship between available selection and conversion?

Answers:

- 1. Geodemographic variables**
- 2. Key brands (e.g. Nando's) availability**
- 3. Selection diversity**
- 4. All of the above**
- 5. All of the above and more**
- 6. None!**
- 7. No idea**



BUSINESS QUESTION

***How does available selection
impact customer conversion?***



FIRST ANSWER

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A BETTER ANSWER

Selection impact on conversion is confounded by a myriad of factors, the exact relationship is hard to determine



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SO WE SHOULD DO MORE SCIENCE





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How does available selection impact customer conversion?



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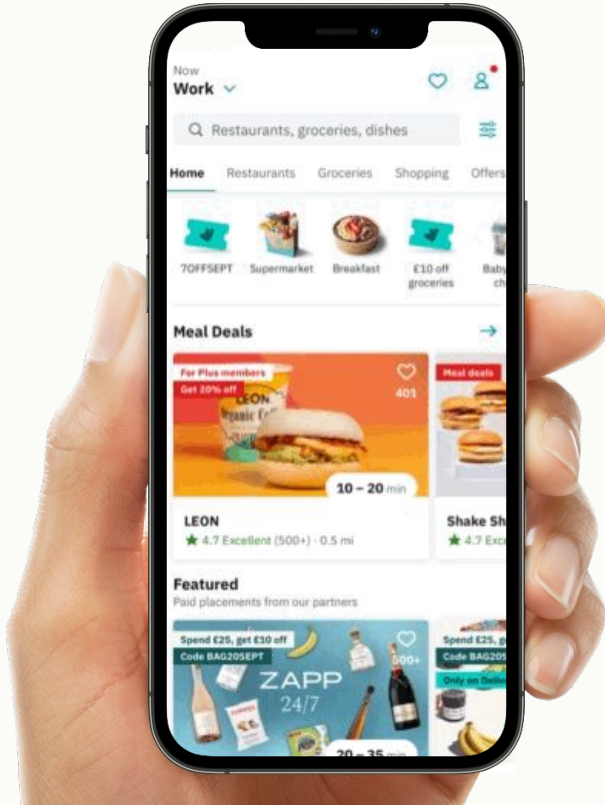
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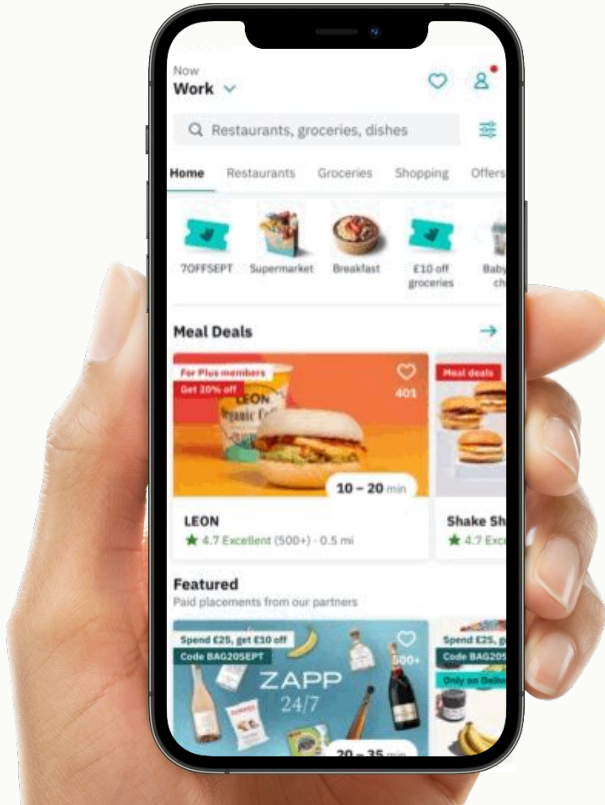
~~***SO WE SHOULD DO MORE SCIENCE***~~





BUSINESS QUESTION

How does available selection impact customer conversion?



BUSINESS QUESTION

How does available selection impact customer conversion?



(PROBABLY) THE BEST ANSWER

What would we do differently as a business if we we knew this?



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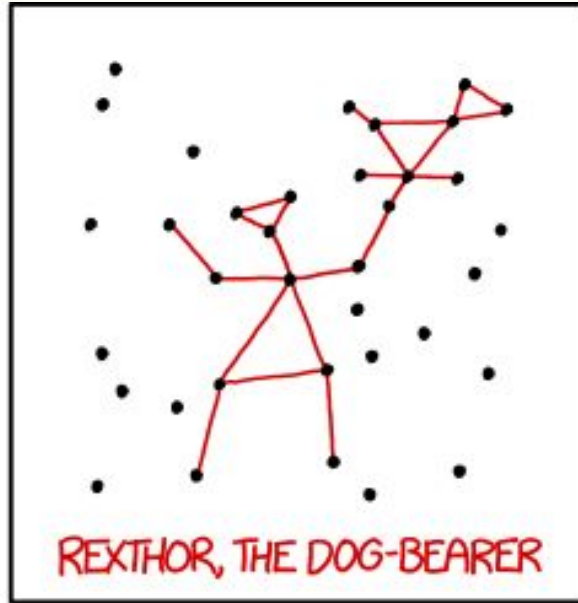
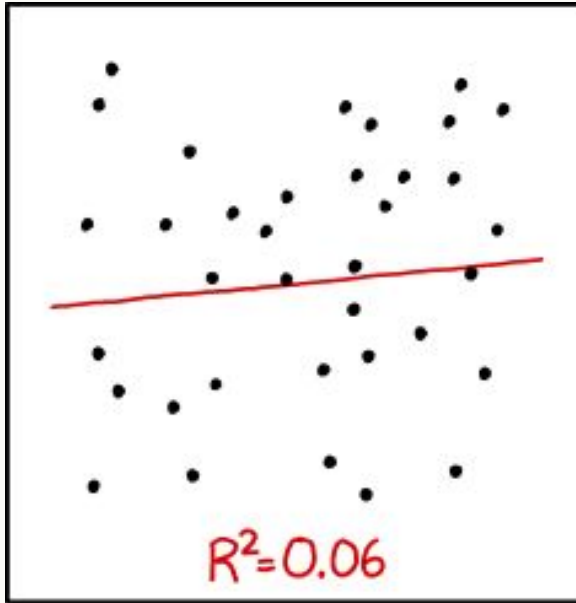
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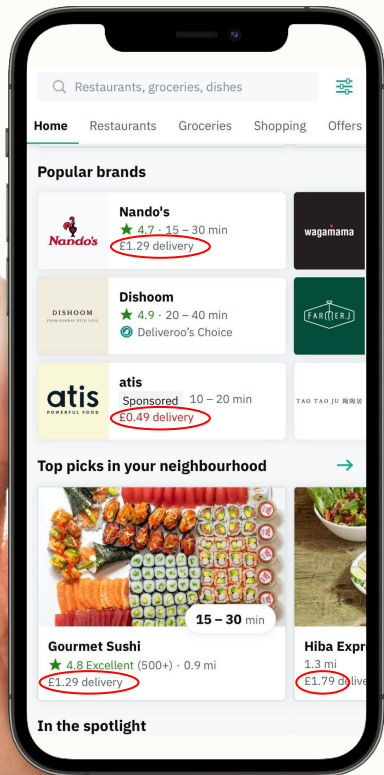


I DON'T TRUST LINEAR REGRESSIONS WHEN IT'S HARDER TO GUESS THE DIRECTION OF THE CORRELATION FROM THE SCATTER PLOT THAN TO FIND NEW CONSTELLATIONS ON IT.

ANALYSIS - PARALYSIS IS..

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Restaurants, groceries, dishes

Home Restaurants Groceries Shopping Offers

Popular brands

Nando's
★ 4.7 · 15 - 30 min
£1.29 delivery

wagamama

Dishoom
★ 4.9 · 20 - 40 min
Deliveroo's Choice

FARRIER

atis
Sponsored 10 - 20 min
£0.49 delivery

TAO TAO JU 陶陶居

Top picks in your neighbourhood

Gourmet Sushi
★ 4.8 Excellent (500+) · 0.9 mi
£1.29 delivery

15 - 30 min

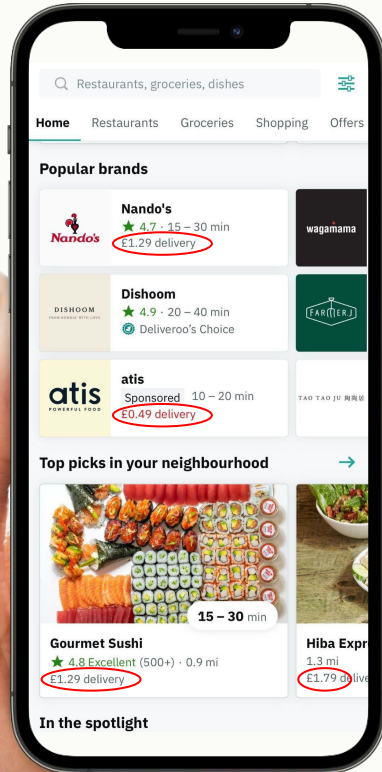
Hiba Expr
1.3 mi
£1.79 delivery

In the spotlight



BUSINESS QUESTION

How do changes in pricing impact customer behaviour?





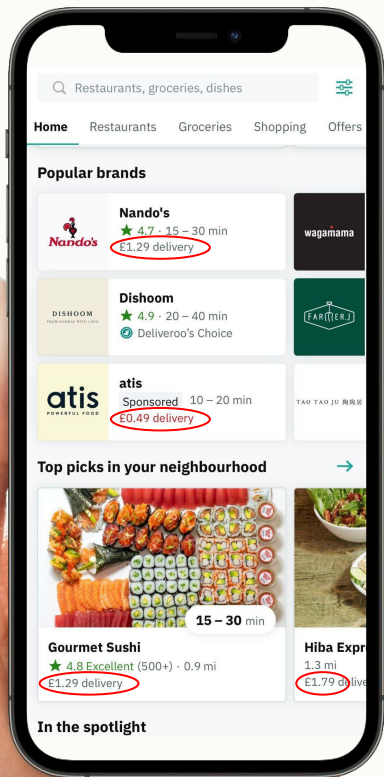
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How do changes in pricing impact customer behaviour?



FIRST ANSWER

Great question. Let's run some experiments!





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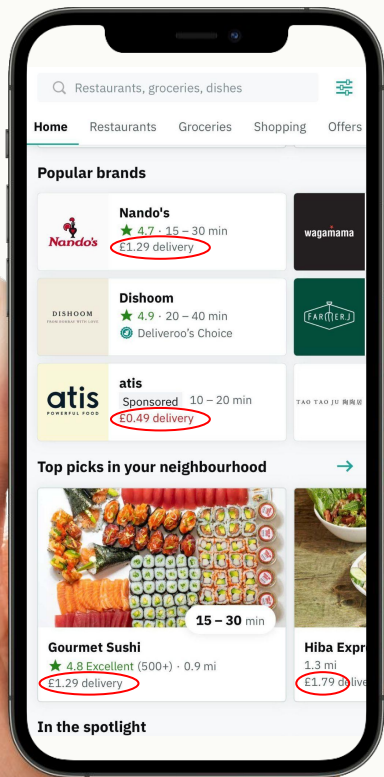


FIRST ANSWER

Great question. Let's run some experiments!



We found that the change in prices had no effect on customer conversion and frequency.





BUSINESS QUESTION

How do changes in pricing impact customer behaviour?



FIRST ANSWER

From our experiments we found that the change in prices had no effect on customer conversion and frequency.



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How do changes in pricing impact customer behaviour?



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From our experiments we found that the change in prices had no effect on customer conversion and frequency.

THE REAL BUSINESS QUESTION

How do changes in pricing impact customer behaviour, in the long term?



BUSINESS QUESTION

How do changes in pricing impact customer behaviour?



FIRST ANSWER

From our experiments we found that the change in prices had no effect on customer conversion and frequency.

THE REAL BUSINESS QUESTION

How do changes in pricing impact customer behaviour, in the long term?



THE REAL ANSWER

We can only measure the impact in the short term and will need to combine experimental data, observational data, user research, and business intuition to form a view about the likely long term impact.



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LESSON 3.

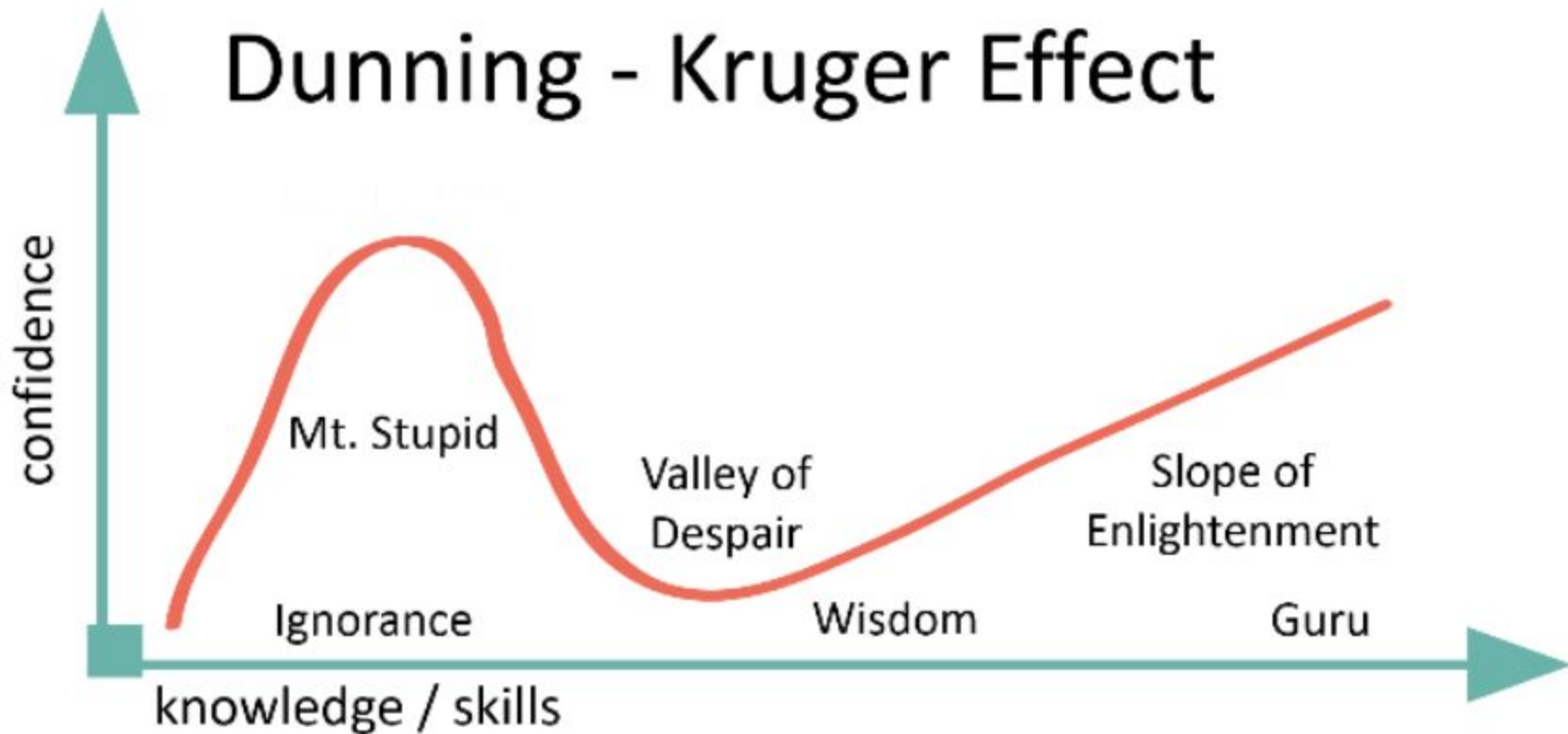
DEMOCRACY IS ONLY AS
GOOD AS THE

EDUCATION AROUND IT

(SOCRATES)



Dunning - Kruger Effect





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DATA REVOLUTION

Break down
data silos

Make data
accessible

Promote data
literacy

Data democracy

Everyone has direct access to the data and insights that benefit them in their job

Democracy is only as good as the education around it



We are still figuring this out at Deliveroo but so far we know that..

Democracy is only as good as the education around it



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Education must be on-going

One-off training sessions and certifications have a short “shelf-life” when the data, tools and the business are rapidly evolving.

Democracy is only as good as the education around it



We are still figuring this out at Deliveroo but so far we know that..

- 1 Education must be on-going**
One-off training sessions and certifications have a short “shelf-life” when the data, tools and the business are rapidly evolving.
- 2 Data literacy is not a tick-box exercise**
Fluency in interrogating data and drawing insights from data requires technical skills, business acumen and experience

Democracy is only as good as the education around it



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1

Education must be on-going

One-off training sessions and certifications have a short “shelf-life” when the data, tools and the business are rapidly evolving.

2

Data literacy is not a tick-box exercise

Fluency in interrogating data and drawing insights from data requires technical skills, business acumen and experience

3

Data literacy is required from everyone

Almost everyone will work with data and insights daily - be it in ‘producing data’ (engineers), doing sophisticated analysis (data experts), producing business reports or reading business reports - all of it will require some level of literacy

**THE FIRST RULE
OF DUNNING-KRUGER CLUB**

**IS YOU DON'T KNOW
YOU'RE IN DUNNING-KRUGER CLUB**



"WITH GREAT DATA COMES GREAT
RESPONSIBILITY"





THANK YOU

