Your meal is delivered, by data science

Matleen Makko-Boronad

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Matleen - things to know about me

I am a Data Science Manager @ Deliveroo

- Data Science for Restaurant Strategy
- Experimentation Platform

I am Estonian

Living in London

I studied maths

At work I am challenged by
- People management
- Improving data science communication
- Experimentation at scale
Food Delivery ↔ Data Science
Deliveroo is a 3-sided marketplace

consumers

Deliveroo

Riders

Restaurants

Private & Confidential
Life of a food delivery order

Before..  
Selection curation

during..  
Fraud detection

after..  
Rider network management
Machine decisions
Life of a food delivery order

Before..  
Selection curation

during..  
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Machine decisions

Marketing & CRM  
Restaurant Supply  
Pricing  
Rider Supply  
Customer Care

(Mostly) Human decisions

Planning & Strategy

Private & Confidential
# Life of a food delivery order

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<thead>
<tr>
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## Human decisions
- Marketing & CRM
- Restaurant Supply
- Pricing
- Rider Supply
- Customer Care

## Machine decisions
- (Mostly) Human decisions

## Planning & Strategy

Private & Confidential
Data science is an amalgamation of skills

- Machine Learning
- Statistical Hypothesis testing
- Causal inference
- R/Python
- Advanced SQL
- Reporting & Data Visualisation
- Strategic Analytics
- Quick Maths
- Leadership
- Collaboration
- Communication
- Software engineering
Very few people have ALL the skills but most have a combination

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Machine Learning

Statistical Hypothesis testing

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R/Python

Advanced SQL

Reporting & Data Visualisation

Strategic Analytics

Quick Maths

Leadership

Collaboration

Communication

Software engineering

Data science
Structuring data science teams
There are many ways to structure a data science team .. and no one-size-fits-all

*Should you organise teams by skills?*

*Should you organise teams by business/product areas?*

*Should you have agile squads?*

*Centralised or decentralised model?*
In hypergrowth, data science role and structure is constantly evolving.

- Decentralised organised by business functions
- Centralised organised by skills
- Decentralised organised by squads
- Centralised organised by business functions, product areas and skills

ILLUSTRATIVE
Challenges of building & scaling data science teams (in hypergrowth)
Challenge 1 - THE UNICORNS

Everyone wants one

.. but there are few around
A solution - build diverse data science teams
As a data scientist, you can..

- Start as a generalist and become specialised
- Start specialised and become a generalist
- Specialise in different skill areas at different times in your career
Challenge 2 - LOST IN TRANSLATION

Everyone wants more data scientists

.. but business and data science often misunderstand each other
## A solution - Building trust in data science through good communication

<table>
<thead>
<tr>
<th>As a data scientist, you should focus on..</th>
<th>Practical Tips &amp; Tricks</th>
</tr>
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<tbody>
<tr>
<td><strong>Know what your audience cares about</strong></td>
<td>• Pick out 1-2 key points (<strong>KePos</strong>) from your work relevant to the specific audience and focus on those</td>
</tr>
<tr>
<td></td>
<td>• Do not underestimate your audience</td>
</tr>
<tr>
<td><strong>Whilst omitting the irrelevant, avoid generalising</strong></td>
<td>• Keep key technical details relevant to the <strong>KePos</strong></td>
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<tr>
<td></td>
<td>• Remove all content that doesn’t help the audience to understand the <strong>KePos</strong></td>
</tr>
<tr>
<td><strong>Tell a story</strong></td>
<td>• Opt for language that is simple and clear</td>
</tr>
<tr>
<td><strong>Spark interest and provide opportunities for further learning</strong></td>
<td>• Explain a complex technical topic with simple examples that stay coherent throughout</td>
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<td>• Use visualisations that are annotated and appropriate, keep visual language consistent</td>
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<td>• Give memorable names to concepts you are explaining - these are easier to remember and to refer to</td>
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<td>• Provide materials your audience can deep dive into and read in their own time</td>
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Challenge 3 - DEMOCRATISING DATA SCIENCE

Everyone wants more data scientists

.. but businesses grow faster than data science teams can keep up with
A solution

1. Invest in data engineers
2. Build and/or buy platforms
3. Structure data science teams scalably
THANK YOU!
Questions?

Matleen Makko-Boronad

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