



Topic for today:

Data democratization

From data strategy to the **golden path**

Sacha & Melissa

28th March 2022
Applied Machine Learning Days

bol.com 

A person's silhouette is shown from the chest up, with their arms raised and hands behind their head, framing a view of the night sky. The Milky Way galaxy is visible, stretching across the frame. A small silhouette of a person stands on a horizon line in the distance, looking up at the stars. The overall scene is dark and atmospheric, with a focus on the vastness of space.

Investing in big data is easy

Using it effectively is hard

Tricia Wang

Six steps to Data Democratization

The golden path

1

Data strategy



2

Data governance



3

Data skills



4

Data stack



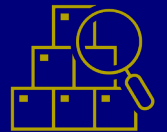
5

Data literacy



6

Data products



Hi!



Sacha Roggeveen
Head of Data & Analytics

&



Melissa Perotti
Product Manager CH Datalab

Bol.com has over 12 million customers



Yes



No

bol.com [®]

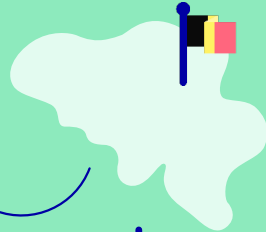


1999





2010



Live in Belgium!





2011

bol.com

From E-tailer to
Platform





2012





2022

>47.000

partners





>34 million

Products in 24
shops



~ 13 million
customers



~ 4.000
employees

**1 of 2
Dutchies &
Belgians
who shop
online do this
@ bol.com**



Tout pour la mode à vivre pleinement

Nouvelle collection mode



Les jouets les plus populaires prix réduit



Décorations de Pâques LEGO prix réduit



Remise sur détergents



Nouveaux jouets



Every strategic decision should be backed by a data analysis



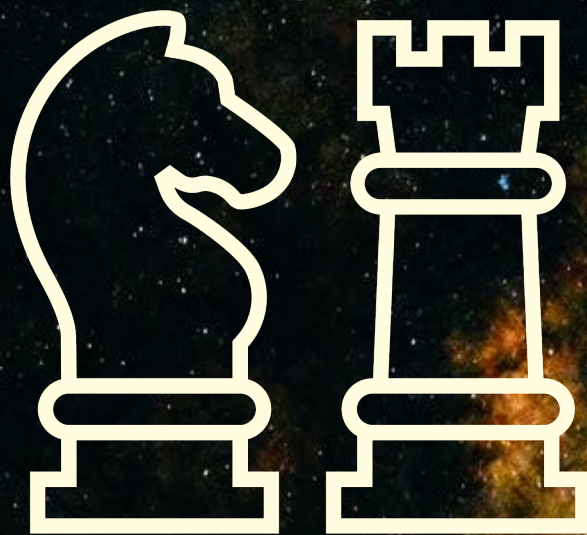
Yes

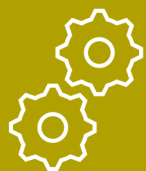


No

#1 : Data Strategy

How data maturity & strategy create the fundament of it all...



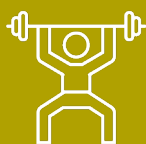


Automate

We need to



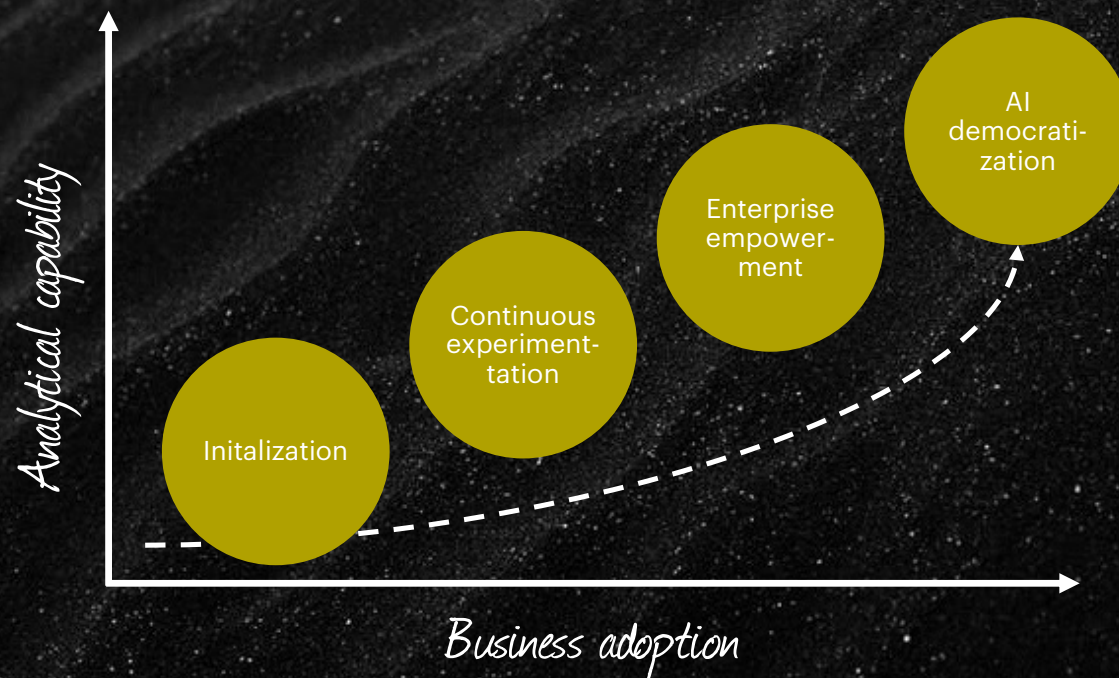
it up!



Empower

**Data analytics is
the biggest
bottleneck in the
learning speed of
the organisation**

It is key in becoming an AI driven organization



Initialization

- Find and initiate first use cases: identify opportunities, boot up data, people & tools

Continuous Experimentation

- Expand team, infrastructure and company presence. Define standard ways of working

Enterprise Empowerment

- Grow data & AI practice across all business units and put business in driver's seat; buy-in required!

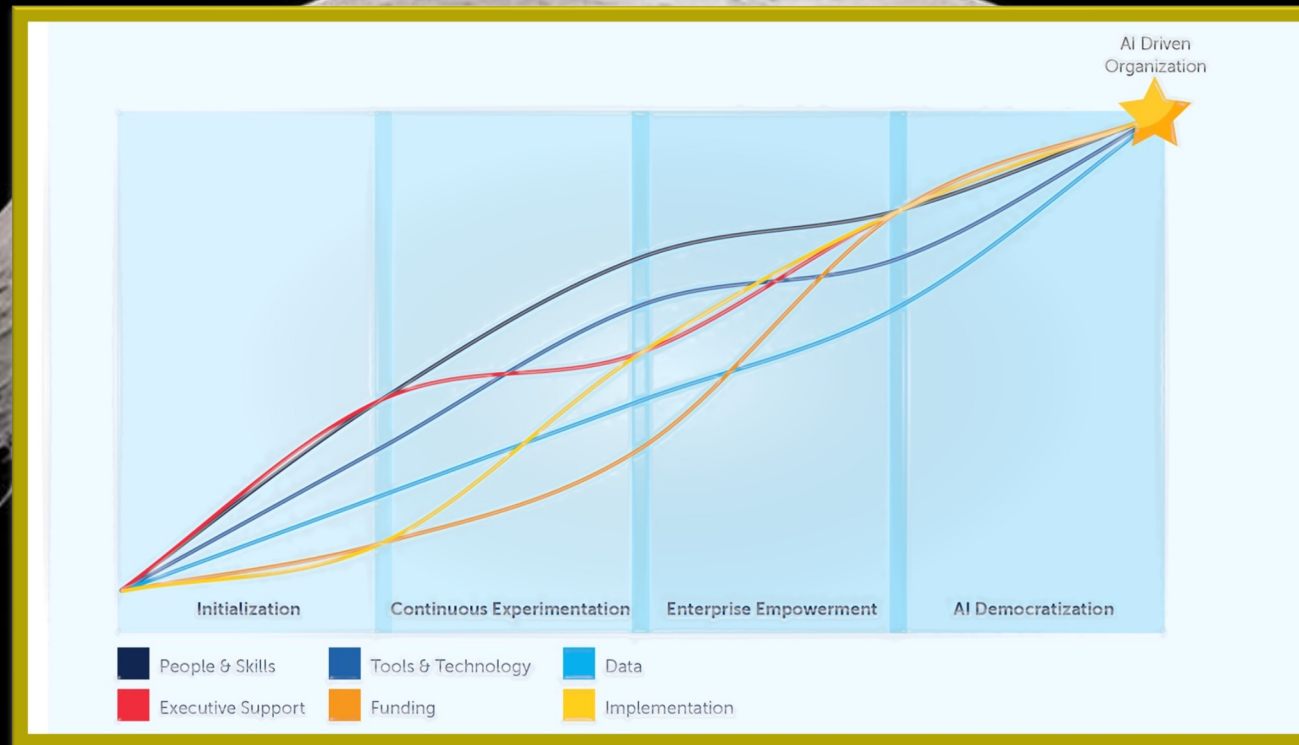
AI Democratization

- AI literacy in genes of the company; **anyone has skills** required to make data & AI driven decisions

The black hole of effort..



Each phase has different needs and focus points



What **to do** tomorrow



1

No data = no decision policy

2

Check if you have data people at (senior) strategic decision level. if not: Hire!

3

Show what you got! More PR about your data

4

Assess in which phase you are and detect what you need to get to the next one

Storing data in another continent will cause problems



Yes



No

Data Governance

...maybe not the favorite of the class, but
VERY important!

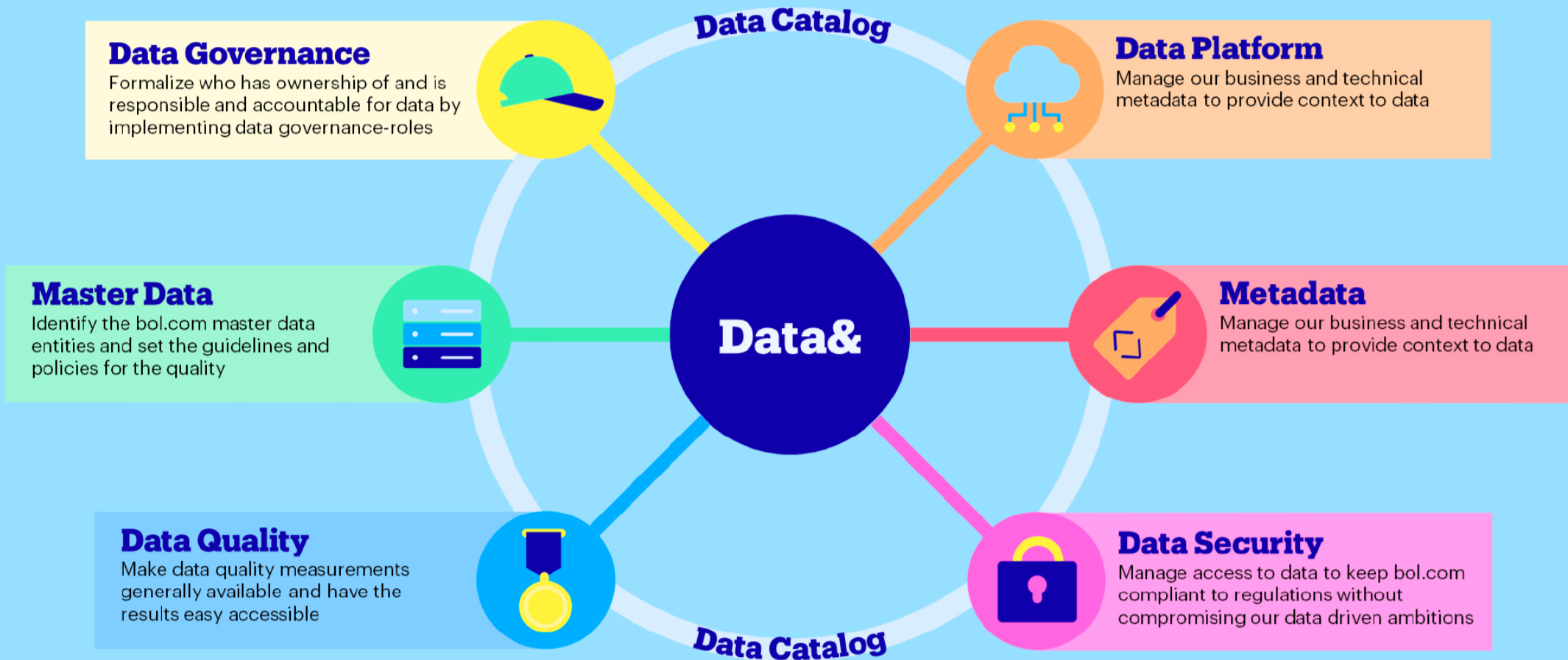


**Data Governance is
not a nice to have
anymore, it's a must.**

my ~~body~~
Data

my rules

my
decision



Weather reporters are also part of the analytics field



Yes



No

Data Skills

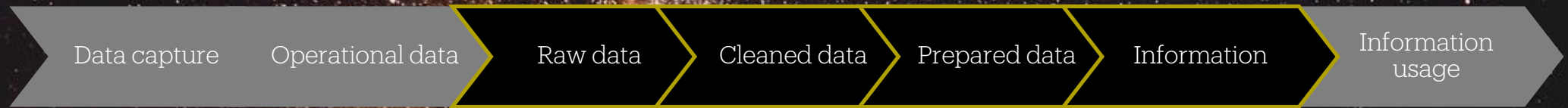
Does your team has what it takes?



Data comes from Mars, AI comes from ...

3

Data Skills



data production



Data roles

Data analyst

Analytics engineer

Data engineer



AI roles

Analytics translator

Data scientist

Machine learning engineer



User role

Project lead

Leadership

The Analytics Engineer

3

Data Skills

Applies best practices of software engineering

Build data transformations and automate work flows

Provides high quality and ready for use data to data consumers

Maintains data definitions and documentation

Enables the business to leverage (low code) tooling



The Analytics Translator

3

Data Skills



Translates
business
problems in
data
solutions

Has expert
domain
knowledge



Aligns
business
and tech by
putting
goals up
front



Designs
data
experiments



Understands
which data
roles are
needed

What **to do** tomorrow

**1**

Check who have the AT and AE-role capabilities

2

Think about the rest of the data & AI roles: do you have all covered?

3

Make sure training & development is in place for all roles

4

Does recruitment know the hiring standards?

Data lake or data warehouse?



Data lake



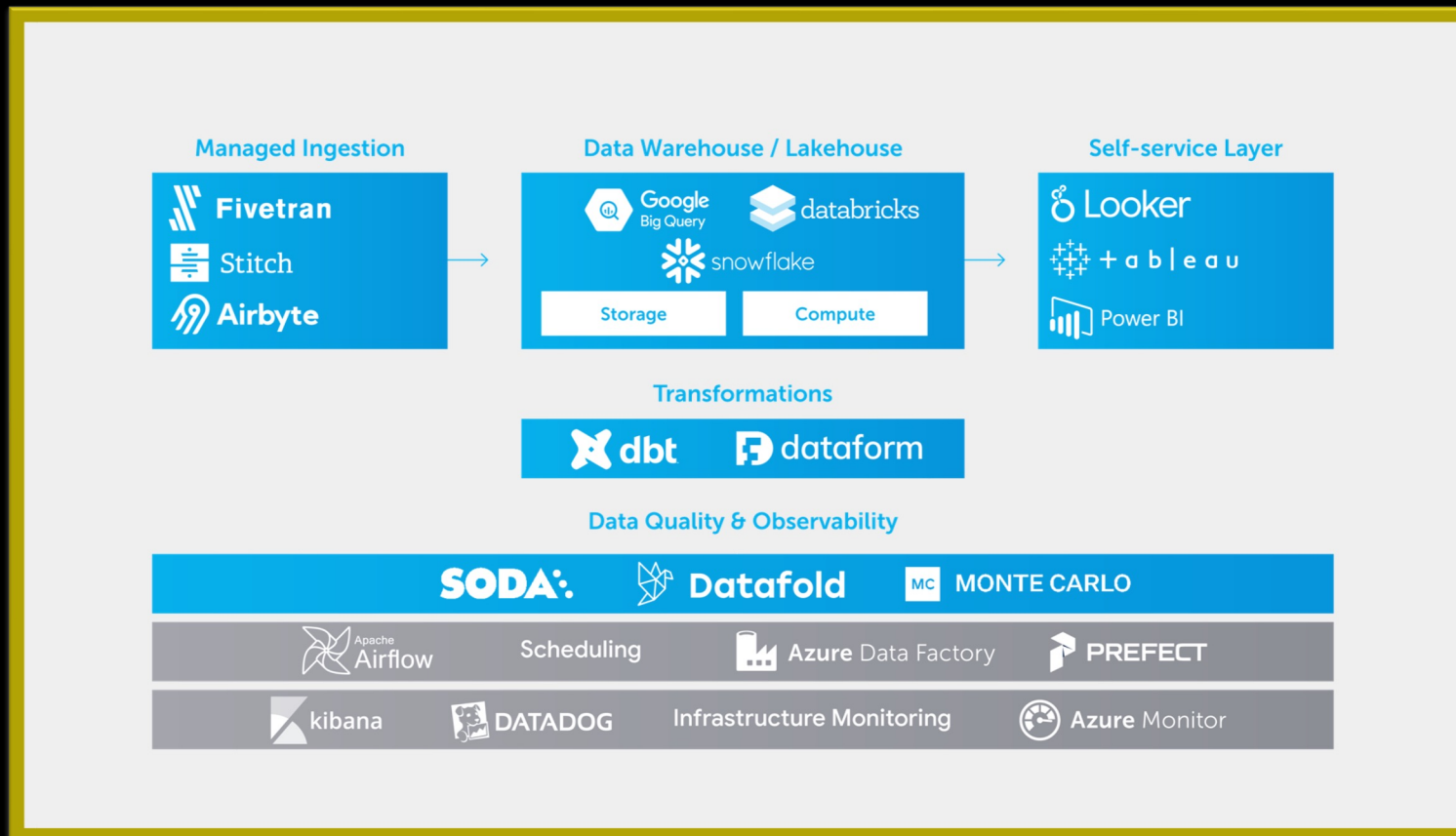
Data warehouse

Data Stack

What do you use?



The modern data platform



What **to do** tomorrow

**1**

Decide what are the preferred tools for each job

2

Make it easy to learn and implement them

3

Involve users in improving data tool stack

4

Keep on the lookout for better alternatives

Every employee should be able to query the company data



Yes



No

Data Literacy

make data accessible



**Make data
your **super**
power**



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Shifting the data-business boundary



PL, Leadership

Expanding the skill set of the information users by providing the Information User training and self-service BI/Analytics tools to facilitate data democratization

What **to do** tomorrow

**1**

Include documentation in your way of working

2

Organize data question hours, training and feedback sessions

3

Create a data communication plan (recurring updates, feature the best analysis and knowledge shares)

4

More technical focus on self service for analysts (analytics engineer for better data reliability)

Data Products

Step #6 on the golden path



Finding good use cases, means working backwards, starting at the business value

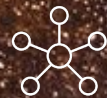


Customer Happiness = the voice of the customer



Value

Customer happiness



What **to do** tomorrow

**1**

Write down the goal function of the product (OKR's)

2

Create a hypothesis tree and start experimenting (design sprints)

3

Make collecting new and better data part of the job

4

Celebrate important milestones with exuberance

How to get your organization on The golden path

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Data strategy



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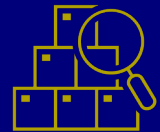
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PS we're always searching for good data professionals!

Interested? Mail to mperotti@bol.com & sroggeveen@bol.com

Thanks

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Ask us anything!