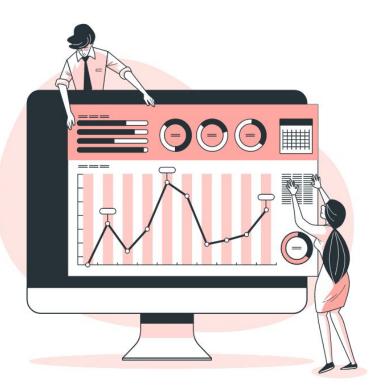
# The Influence of Open Source in the Modern Data Stack

by Victoria Perez Mola



### Hello!

I'm Victoria Perez Mola, Solutions Architect @ dbt Labs



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About the Data Platform

### The Data Platform



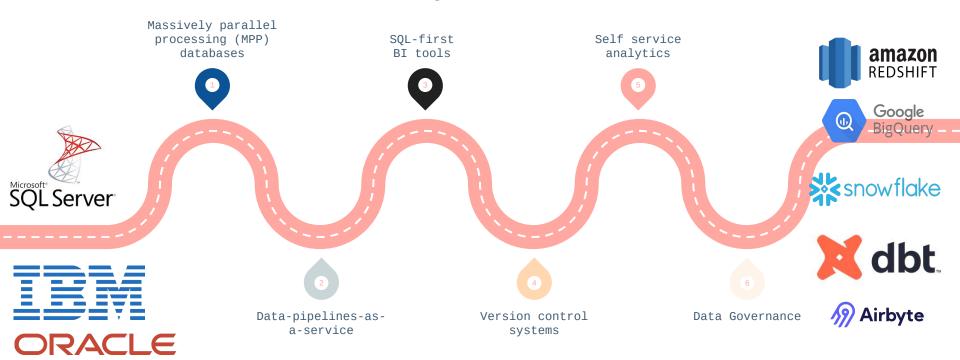


A complete solution that enables:

- Data ingestion
- Data processing
- Data analysis
- Data presentation

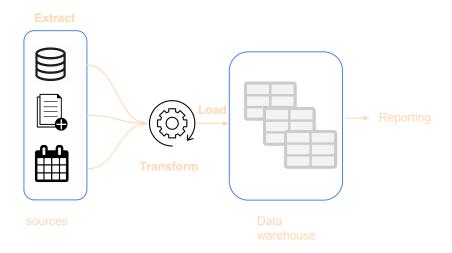
Of the a company's data generated by their own or external systems and processes.

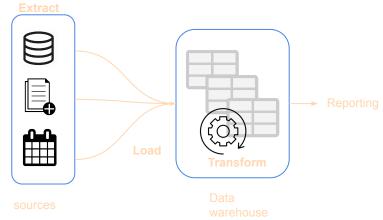
### Data Platform developments





### ETL vs ELT





- Slightly more stable and compliant data analysis
- Higher storage and compute costs
- Engineering usually a bottle neck

- Faster and more flexible data analysis.
- Lower cost and lower maintenance
- Discrepancies in the transformation logic doesn't affect the source data



# **Q 2**The Modern Data Stack

### The Modern Data Stack

Data ingestion



Data transformation



**Data Analysis** 







Data warehouse



**Data Catalog** 



**Data Quality** 

### **TOOLING**

























Data Storing

Data loading

Data Transformation

Data presentation













O3 Why Open Source?

## **Open Source Evolution**



Alternative Option



Innovative Option



Risky option



Most secure Option



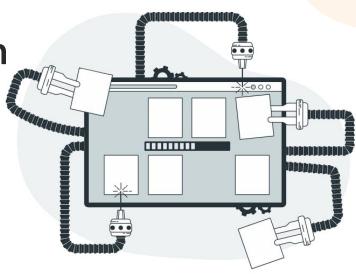
Limited adoption



Stronger communities



Advantages of Open Source



### Free

Low to no entry barrier

# Faster development

Features don't depend entirely on the engineering team capacity

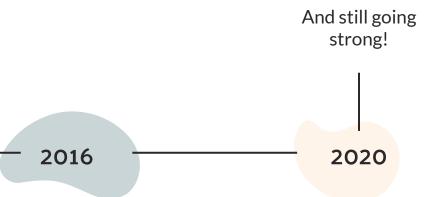
### **Trust**

Code is out in the open, and the tool will outlive the company, if any



# O3 How Open Source?

### The dbt Story



Started as an Open Source product

Released the first commercial product on top of dbt core



#### **About us**

dbt Labs is on a mission to empower data practitioners to create and disseminate organizational knowledge. Having pioneered the practice of analytics engineering, we're now fortunate to support a community of over 25,000 data practitioners committed to changing how data teams work together.

9000

companies using dbt Core

4500

trained analytics engineers

1800

dbt Cloud customers

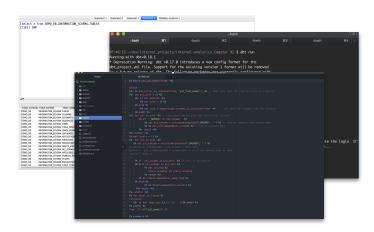
32000

dbt Community Slack members

# **Choosing your experience:** dbt Core provides everything highly technical teams need to transform data

#### dbt Core

Self-serve open source transformations



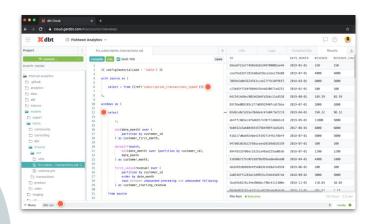
Great for highly technical teams comfortable in the command line

- Roll your own ELT pipelines
- Includes SQL compilation logic
- Jinja templating
- Database adapters
- Testing frameworks
- Documentation

### Choosing your experience: dbt Cloud removes friction to rapid, reliable analysis

#### dbt Cloud

Operationalize analytics workflows



Great for teams that want to move quickly in a highly coordinated way

- Fastest and most reliable way to deploy
- User-friendly IDE
- Job scheduling
- Git-enabled automated version control
- Centralized logging and alerting
- CI/CD with Slim CI
- Hosted documentation
- Options for authentication and support

### **TOOLING**















# **Fivetran**













Data loading

Data Transformation

Data presentation











### **TOOLING**















Data Storing

Data loading

Data Transformation

Data presentation









# Thanks!

Do you have any questions?





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### Resources



- Building an End-to-End Open-Source
- Modern Data Platform
- Open Source Powers the Modern Data Stack
- Building an Open Source Data Stack
- <u>Time Till Open Source</u>
- The asymmetry of open source
- Understanding the MDS
- The Modern Data Stack: Open-source Edition
- Of the Community, By the Community, For the Community
- Goodbye RJMetrics, Hello Fishtown Analytics
- <u>2022-05-dbt-a-core-story</u>