How open-source enables innovation: a case study with dbt and Lightdash

dbt Labs & ⚡**Lightdash**

Agenda

- Introductions

- Overview of dbt & Lightdash

- Principles that enables innovation

- Demo

- Q&A

Speaking Today

Amy Chen

Senior Partner Engineer, dbt Labs

Katie Hindson

Product & Data at Lightdash

The Principles to drive innovation

The Mindset & The Process

dbt & Lightdash

The dbt viewpoint: **Build data like developers build applications**

Unite on SQL

SQL is used by every cloud
data warehouse, and known
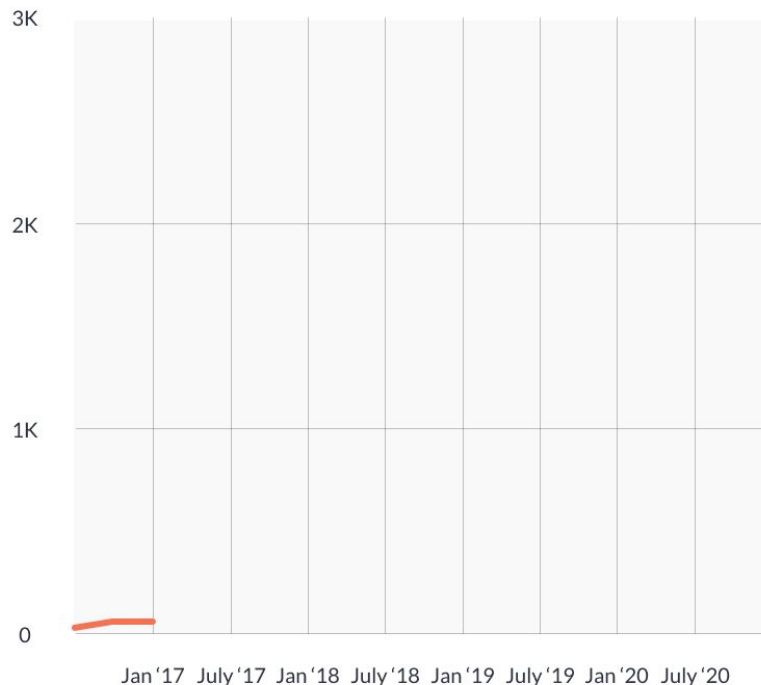by every data team.

Work like engineers

Modularity, testing, CI, &
documentation promote
speed and reliability.
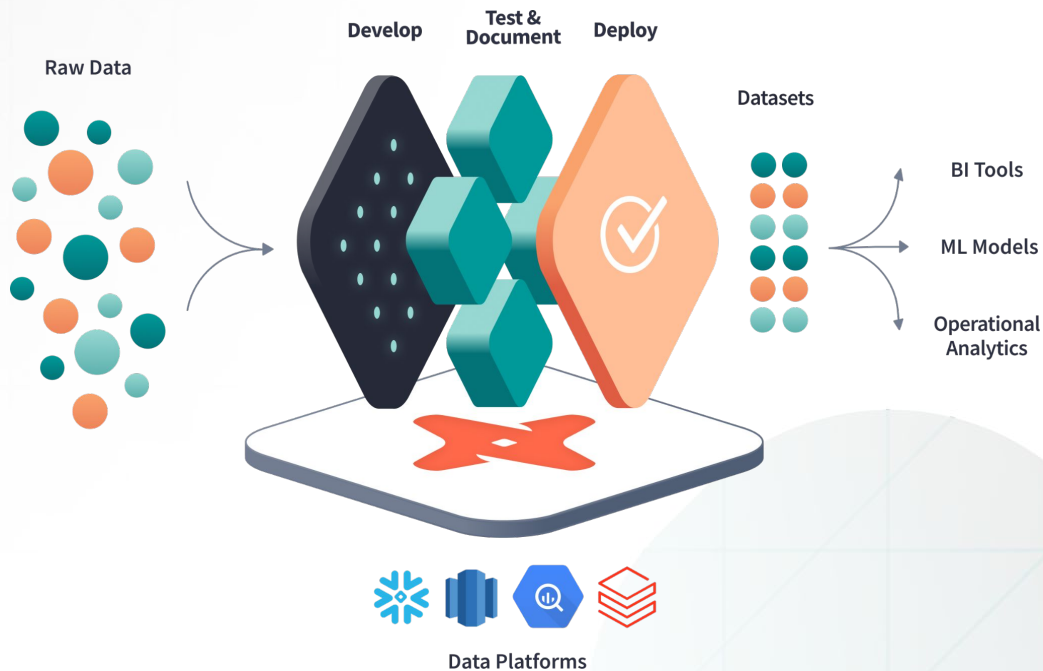
dbt adoption is growing quickly, and organically

7,000+
companies using dbt

2,000+
dbt Cloud customers

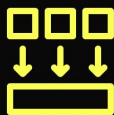**19,000+**
in the dbt Slack community

Develop, test, and deploy data products in your warehouse

⚡Lightdash empowers everyone to answer their questions using your company's data.

Connect Lightdash to your dbt project

Add metrics directly in your dbt project

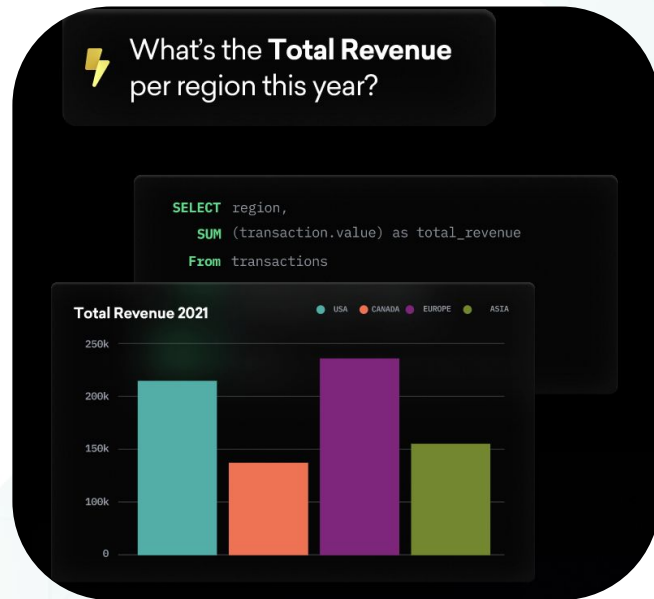⚡ What are the Total Active Users, per day, per ad campaign?

Total active users

● Google Ads 15,355   ● Facebook Ads 12,123   ● LinkedIn Ads 12,123

25k

20k

15k

10k

0

2016   2017   2018   2019   2020   2021

Create and share your insights

⚡**Lightdash** gives users meaningful building blocks to answer their own data questions.

- You have a **curated set of metrics and dimensions** so you can **cut your data** in different ways.

- **Built on dbt** - transform-layer native

- **Build trust in your data** - show freshness, testing and other metadata

- **Keep all of your business logic in one place** - metrics + dimensions defined directly in your dbt project

The Principles to drive innovation

Mindset:
Developer-driven Community

- Accessible documentation
- Transparent collaboration via Slack & Github
  - Public channels over DMs
- Product-driven development

Process:
Technical Enablement

- Modifiable, extensible and reusable
- Platform for third-party apps
- Tech that stays relevant
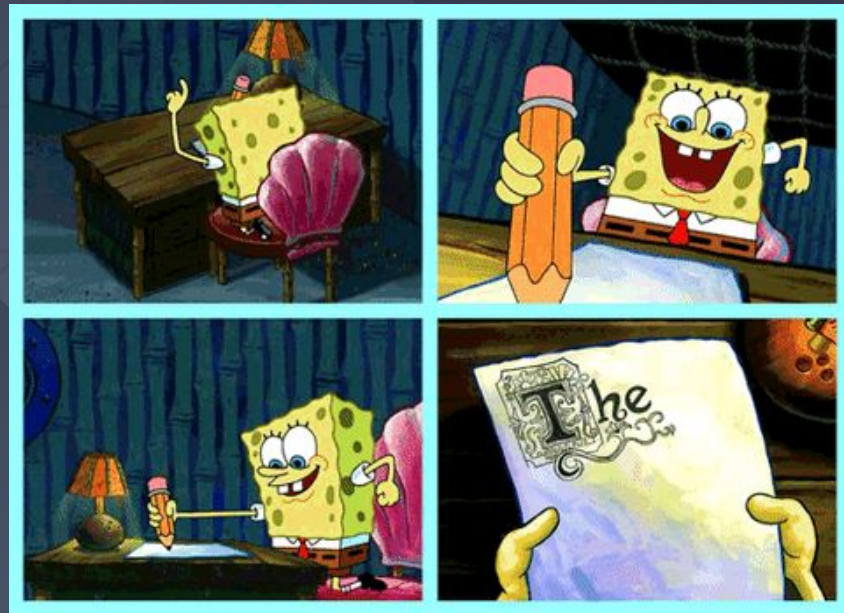
Community Contributions

The Slack community

- 19,000+ data engineers, analysts, vendors
- Channels about dbt best practices, product feedback, and analytics tooling as a whole

Emilie Schario
@emilieschario

Following

On related-ish note, @getdbt definitely has the best slack community. Definitely.

Emilie Schario @emilieschario
The best chat support definitely goes to @PeriscopeData. By far, the highest quality support I've seen in a SaaS product, especially in the data space.

7:34 AM - 3 May 2019

1 Retweet 13 Likes
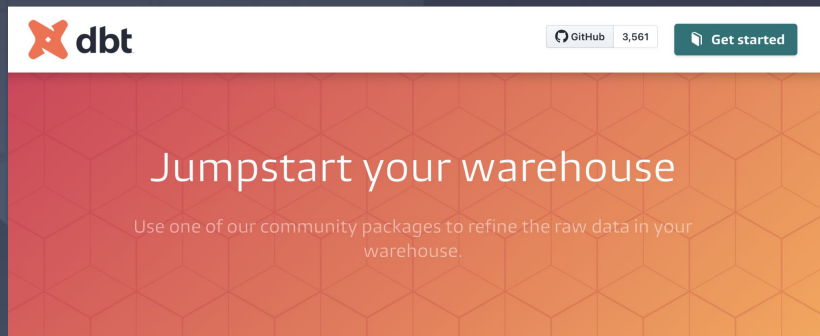
2   1   13

Documentation

- Yes, we all know this is important and difficult to do!
- Meet the user where they are.
- Docs accessible to different technical levels
  - Open to community commentary and edits

Packages

- dbt's version of Python libraries
- Open source code
- Solutions for analytics workflows like:
  - Modeling SaaS datasets for your
  - Access to community perfected macros for testing, db automation

Integrations

- Integrating with dbt and the dbt workflow
- Options
  - Increasing the platforms dbt can run on
  - Consumption of dbt project & metadata

Vendor Supported

These adapter plugins are built and maintained by the same people who build and maintain the complementary data technology.

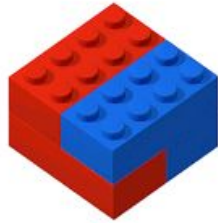| Adapter for	Documentation	Install from PyPi
Materialize (dbt-materialize)	Profile Setup	`pip install dbt-materialize`

Community Supported

These adapter plugins are contributed and maintained by members of the community 🌱

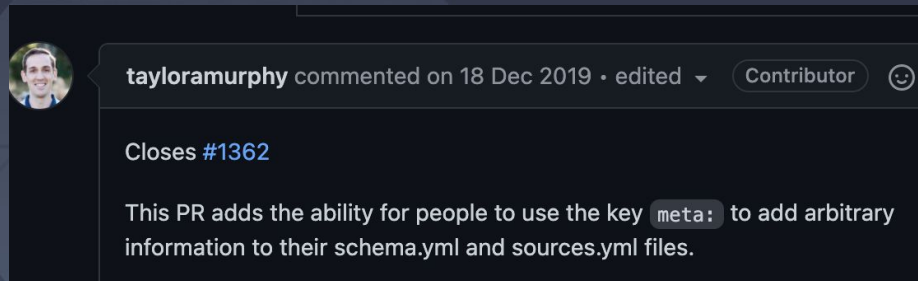| Adapter for	Documentation	Notes	Install from PyPI
SQL Server & Azure SQL	Profile Setup	SQL Server 2016 and later	`pip install dbt-sqlserver`

Technical Enablement

Modifiable, extensible and reusable
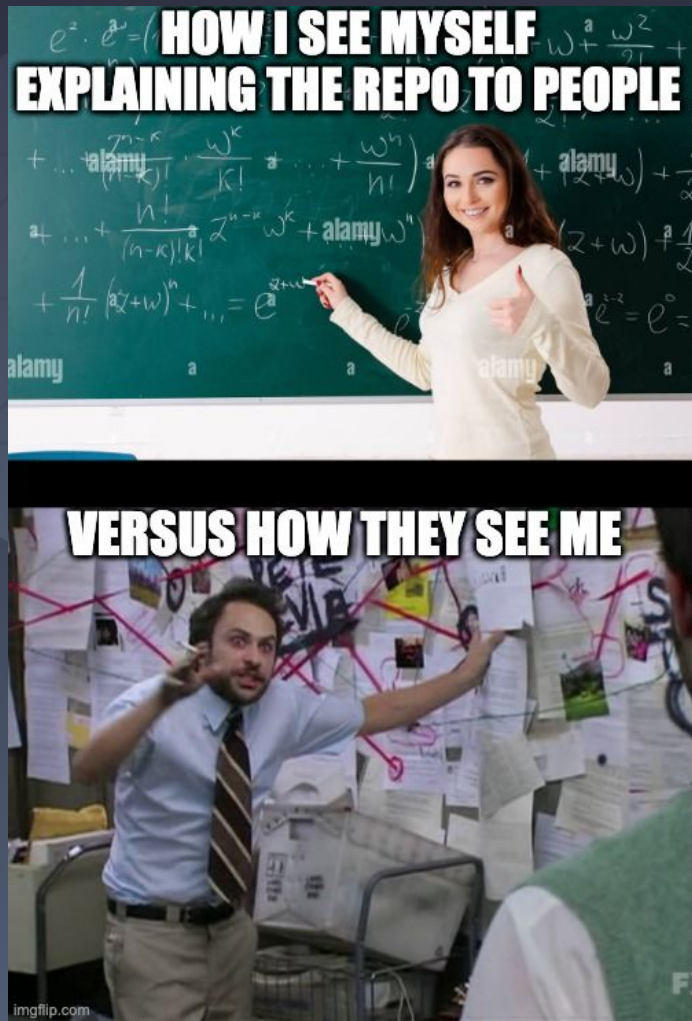
Modifiable, extensible and reusable

● Lightdash started by extending the `meta` key in dbt (a community contributed feature)

tayloramurphy commented on 18 Dec 2019 · edited ▾   Contributor   ☺

Closes #1362

This PR adds the ability for people to use the key `meta:` to add arbitrary information to their schema.yml and sources.yml files.

```
meta:
  metrics:
    unique_customer_count:
      type: count_distinct
```
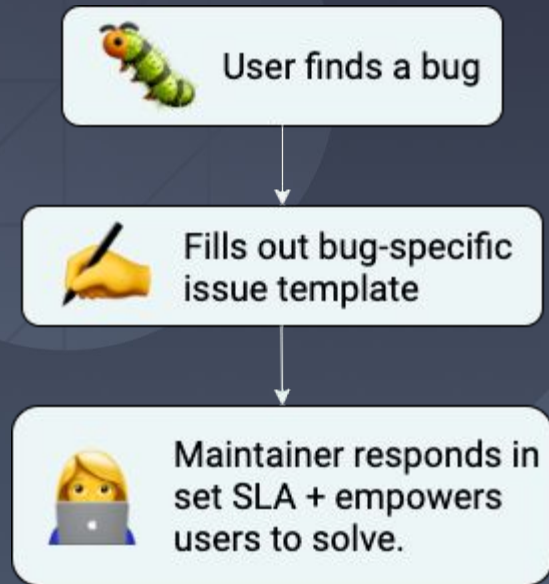
18

Modifiable, extensible and reusable

- Lightdash started by extending the `meta` key in dbt (a community contributed feature)

- dbt has built processes = easier to contribute + enables better contributions

Modifiable, extensible and reusable

- Lightdash started by extending the `meta` key in dbt (a community contributed feature)

- dbt has built processes = easier to contribute + enables better contributions

User finds a bug

Fills out bug-specific issue template

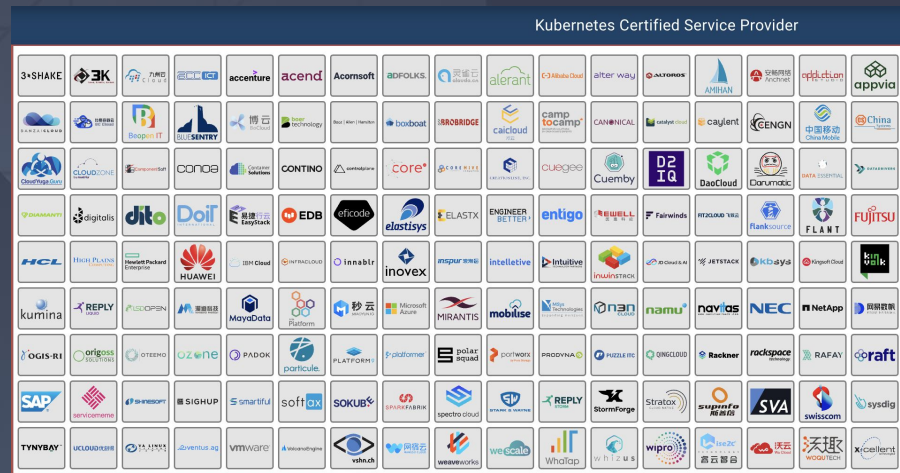Maintainer responds in set SLA + empowers users to solve.

Platform for third-party apps

Platform for third-party apps

- Encourages an ecosystem to build third party applications

- dbt was the platform that we built Lightdash on.

https://landscape.cncf.io/?category=kubernetes-certified-service-provider&grouping=category

Tech that stays relevant

COWABUNGA, DUDES.

Tech that stays relevant

- Promoting a meritocracy of ideas and allowing people to collaborate on projects.

Contributors 165

+ 154 contributors

Tech that stays relevant

- Promoting a meritocracy of ideas and allowing people to collaborate on projects.

- The project will become more robust as different people find different uses for it.

Demo

Questions? Comments?

The Principles to drive innovation

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    - Public channels over DMs
- Product-driven development

Technical Enablement

- Modifiable, extensible and reusable
- Platform for third-party apps
- Tech that stays relevant

Thank you!

Chat with us in dbt Slack - #tools-lightdash

Join us on GitHub - lightdash/lightdash & dbt-labs/dbt-core

Skip the queue for **Lightdash** CLOUD - lightdash.com/osacon

dbt & **Lightdash**