

# Making the most of Local Bike data





# The mission

#### Who

Local Bike, a brand selling high-quality bikes for cities and outdoor. Has opened in January 2016.

#### What

Reports that can be used in-house by the CEO who know how to use data and store managers who don't know much about data apart from financial data.

#### When

The project has to be operational in 6 months but so as to convince the store managers and allow them to see what can be produced, we suggested to present 2 reports by Tuesday November 26.

#### How

2 reports will be presented on Nov. 26

Then we will progress using an agile framework to produce iterations of the project in links with the final users of the reports.





# Timeline

Nov. 19 Kick start, dataset sent to Analytic engineer Nov. 26 First iteration 2 reports to present to users and CFO Dec. 17
Second iteration
Refine initial reports & datavis
Request for more specific kpis

Jan. 3
Second iteration
Review of all reports & datavis
If ok live data ingested

Jan. 3 Third iteration Review reports with live data

# **KPI** axes

We chose for this first set up iteration to concentrate on 3 axes we considered high level, useful immediately for the CEO of small company.

- 1. Sales and revenue
- 2. Stocks
- Clients renewal

This data has been aggregated into two tables that will be used for topical dashboards.



# The final tables



#### Monthly report

#### Sales and revenue from orders data per month

- Total number of orders
- Total revenue
- Average number of items bought in each order
- Average distinct items bought in each order
- Average revenue per order relatively as total order numbers

#### **Stocks**

Number of products low in stock

#### Client renewal

Number of new clients who ordered for the first time this month



### **Popularity report**

#### Brands and products favored by past clients to assert fidelity

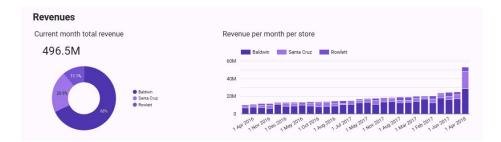
- Product mostly bought per past customer per store
- Brand mostly bought per past customer per store



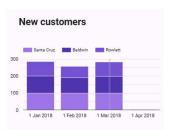
# **Dashboards preview**

#### **Monthly report**









Not finished > visit preview



## Remarks on our first iteration

#### Order status issue

What we understood of the order status

- 1 processed (order date, required date in the future, shipped date null)
- 2 bought in shop? (order and required date are the same, shipped date null)
- 3 ? (order and required date are the same, shipped date null, as above)
- 4 delivered (order date, required date in the future, shipped date)

Hence we used the status 4 as a sale that was shipped.

#### **Nulls**

Do not mark missing information as null. Check in your data acquisition tools or procedure as to leave the field empty.

#### Missing data since April 30 2018 ?

No data in May 2018, just a few for the following months, all in order\_status 3. We suspect a bug.





# **KPIs suggestions for iteration 2**

We suggest meeting with your managers and other end users of our work to see what their **specific needs** might be.

Rising market worth watching specifically

#### **Orders**

Average time lapse between two orders by one client

Cancelled orders

Share of each category by store to see if each store aims at the correct needs of its community

Sales performance of electrical bikes

#### **Stocks**

Stock turnover

Stock ventilated by shops



# **Boost your data for later iterations**

Remarks on specific points we think might help us make the most your data

- replace numbers for order\_status by words
- add one more status to order\_status to cover these : Processed, Shipped, Delivered, Cancelled, Lost
- add a feedbacks feed to track level of satisfaction + add a program that analyses remarks clients might have on the products.
- add a payment table to track payments especially if you have payments in installments
- add gross price in the stock table so as to be able to calculate margins





Storing your raw data

Cleaning / automating your data

Storing your clean data

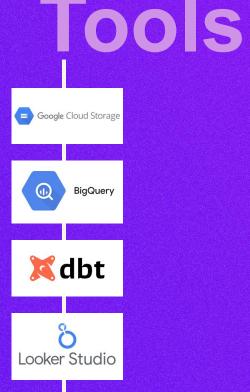
**Operational dashboards** 

Google cloud storage

**DBT** cloud

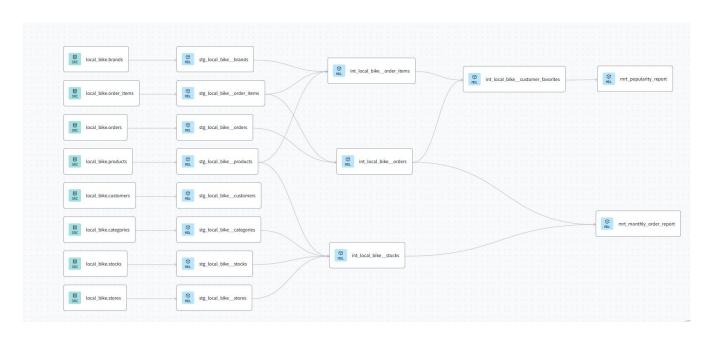
**Google Big Query** 

**Google Looker Studio** 



# Lineage of our models in DBT

There is room for improvement to avoid overlapping connections overall in the second iteration, depending on the new kpis and every new iteration.







# Thank you