
Data analysis for Toys and models company

— 8 October 2021



Presentation outline

- 1) Our objective
- 2) Your company in some key figures
- 3) A brand new dashboard to make enlightened data-driven decisions
- 4) What the data tell us and don't tell us
 - a) Sales
 - b) Finance
 - c) Logistics
 - d) Human Resources
- 5) Database and current data limitations
- 6) Recommendations
- 7) Next steps for our data team



Why we're here

Who we are

The Alpaga Company

An agile data team at your service



Our aim

- Make your data easy to understand and use
- Provide you with decision-making support for your company



Your company in some key figures

- Turnover:
 - 2021: 3 895 429
 - 2020: 3 700 704
- Average monthly turnover:
 - 2021: 432 825
 - 2020: 308 392
- Number of orders per year:
 - 2021 : 1231
 - 2020 : 1161
- Average order:
 - 2021: 3 164 for 35 products
 - 2020: 3 188 for 35 products

**Figures extracted from your database*

**** figures 2021 until the 30th of September**



Toys and Models Company - Dashboard

Turnover 2021

3 982 214

Amount of unpaid orders

240 438

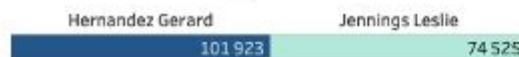
Product category
Tout

Month
9

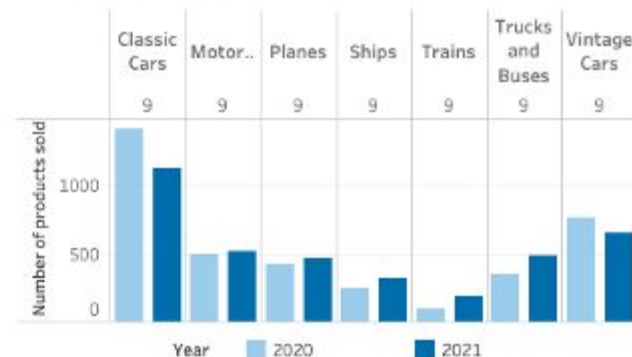
Turnover over the last 2 months by country



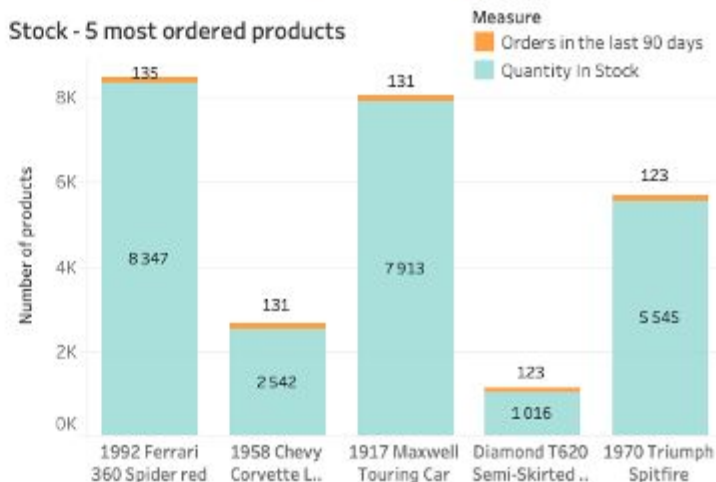
Team - Last month top 2 sellers with turnover



Sales - Number of products sold by category by month compared to last year



Stock - 5 most ordered products



KPI SALES

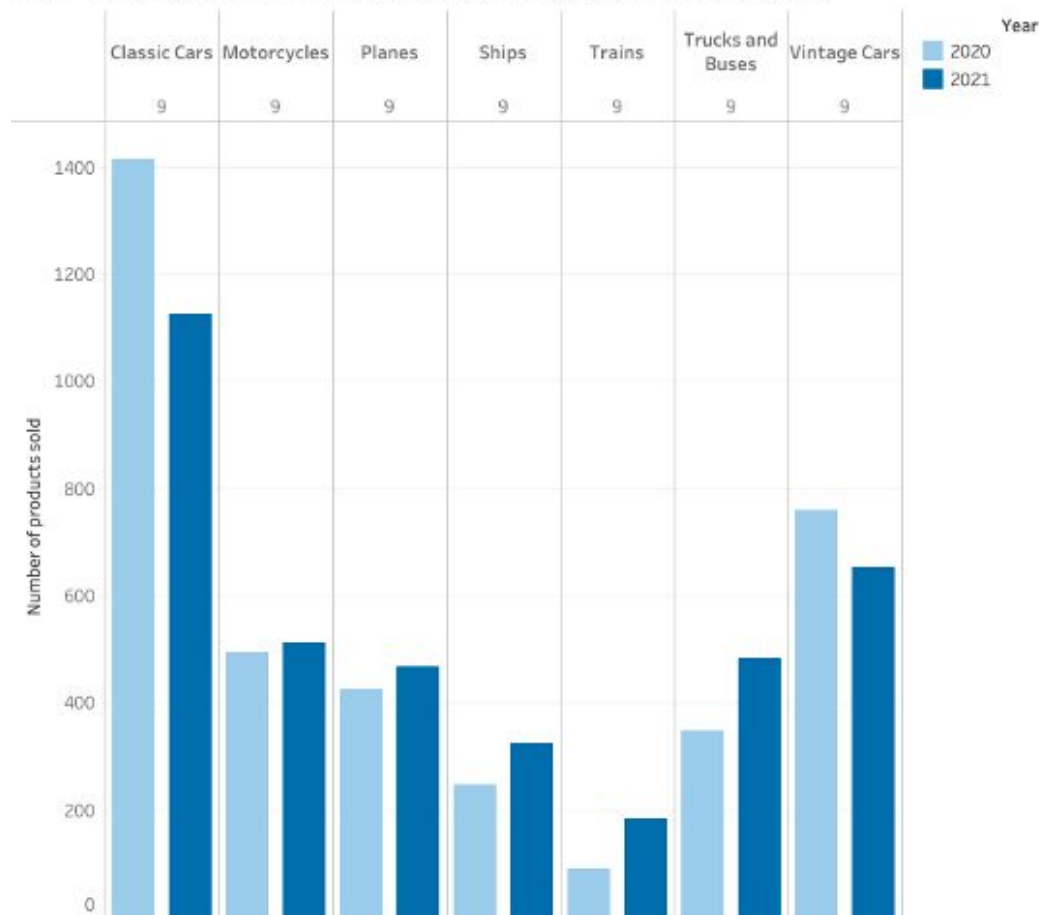


Sales

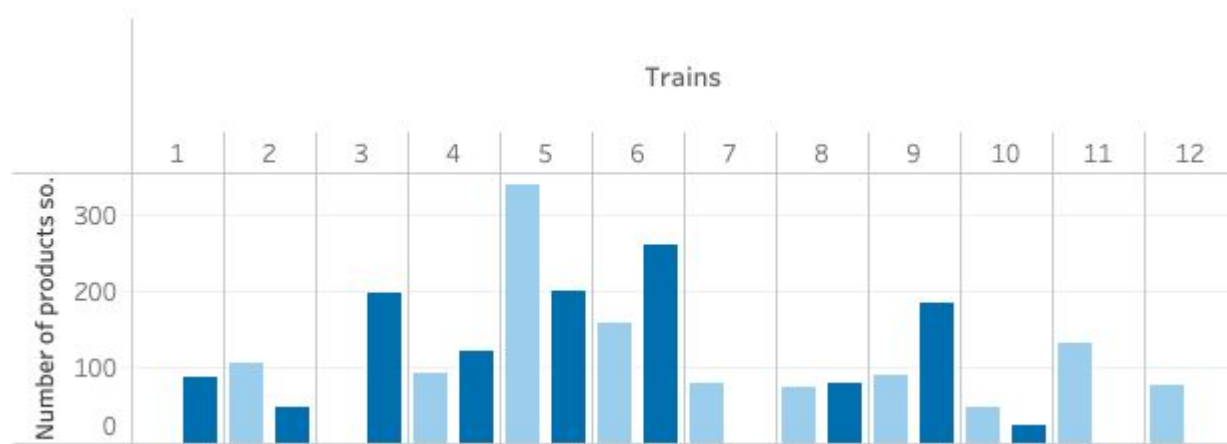
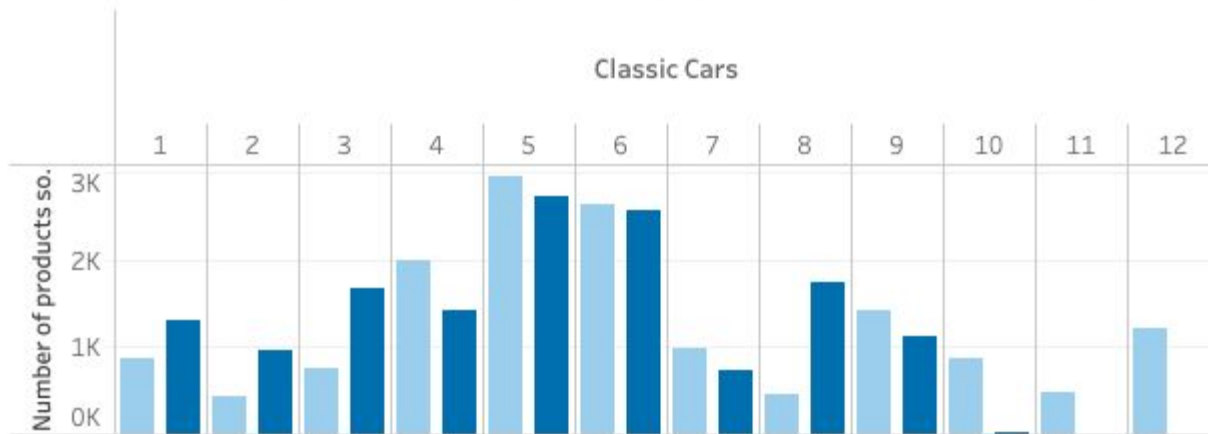
KPI: The **number of products sold**

- by **category** and
- by **month**,
- with comparison and **rate of change** compared to the same month of the previous year

Sales - Number of products sold by category by month compared to last year



Sales - Number of products sold by category by month compared to last year



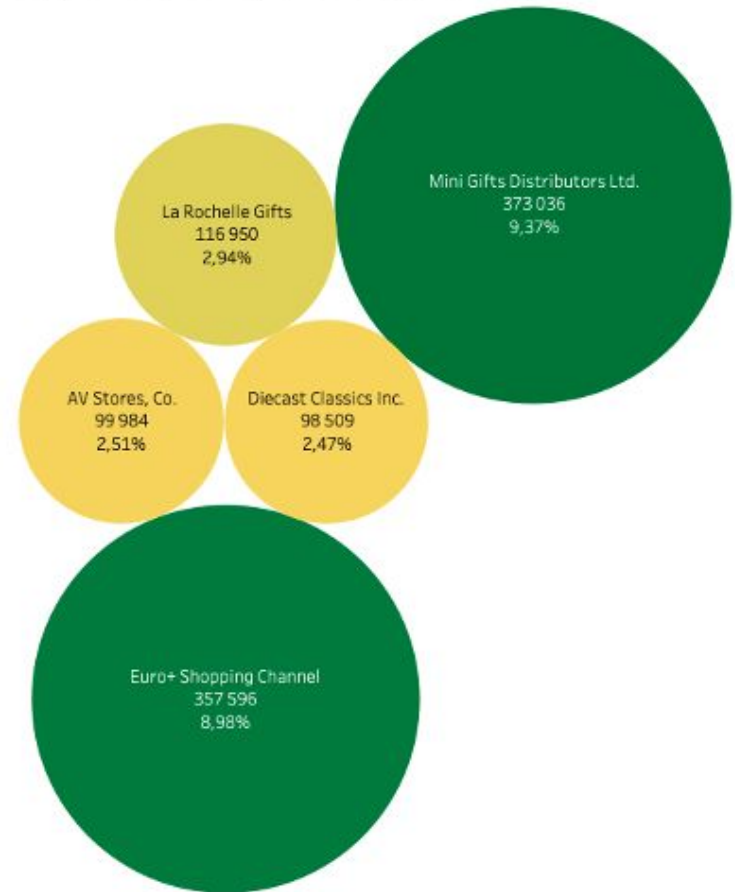
Sales: Our recommendations

- Include information on clients
- Provide information on the turnover and best selling products

Suggested KPIs:

- biggest clients by year or other period with share of turnover (see visualization)
- best products sales

Sales - 5 biggest clients in 2021 (with share of total turnover)



KPI FINANCE

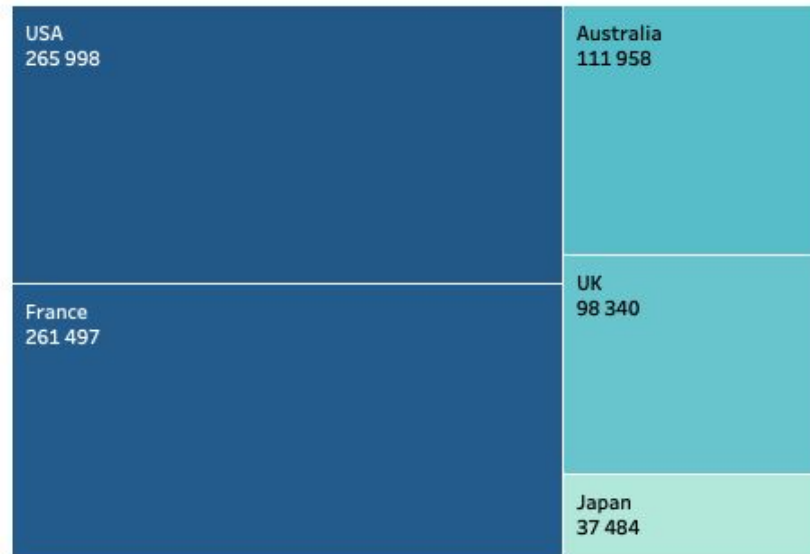


Finance

KPI: The turnover of the orders of the last two months by country

Suggestion :

- add the total turnover for the group above the visualization
- discuss about period used to filter the turnover figures



Finance

KPI: Orders that have not yet been paid

Amount of unpaid orders

240 438

Added KPI: turnover to date

Turnover 2021

3 982 214

Limits:

- payments are linked to customers and not to orders table or better to invoices table
- status of orders field (missing information and unclear name)

Consequence:

- only an estimated figure for outstanding orders to date with consequent bias

bias examples:

- orders made yesterday not sent, not even prepared are included in the sum due
- payments in advance are also included
- customer payment term are not taken in account



Finance: our recommendations

Suggestions about indicator asked:

- add an invoices table linked to the orderdetails table with fields : invoiceNumber, totalAmount, invoiceDate, invoiceDueDate
- link the payment table to the invoices table and not to the customers
- add a field “payment term” in the customers table (to take in account individual payment term from contract if needed)

Suggested KPIs:

- weekly turnover with margin
- outstanding invoices by customers or/and by date
- Turnover comparison to previous year with turnover projection (see visualization)

Turnover projection and comparison 2020-2021

turnover 2021	turnover 2020	projection 2021	change rate
3 982 214	3 700 704	4 778 657	29,13



KPI LOGISTICS

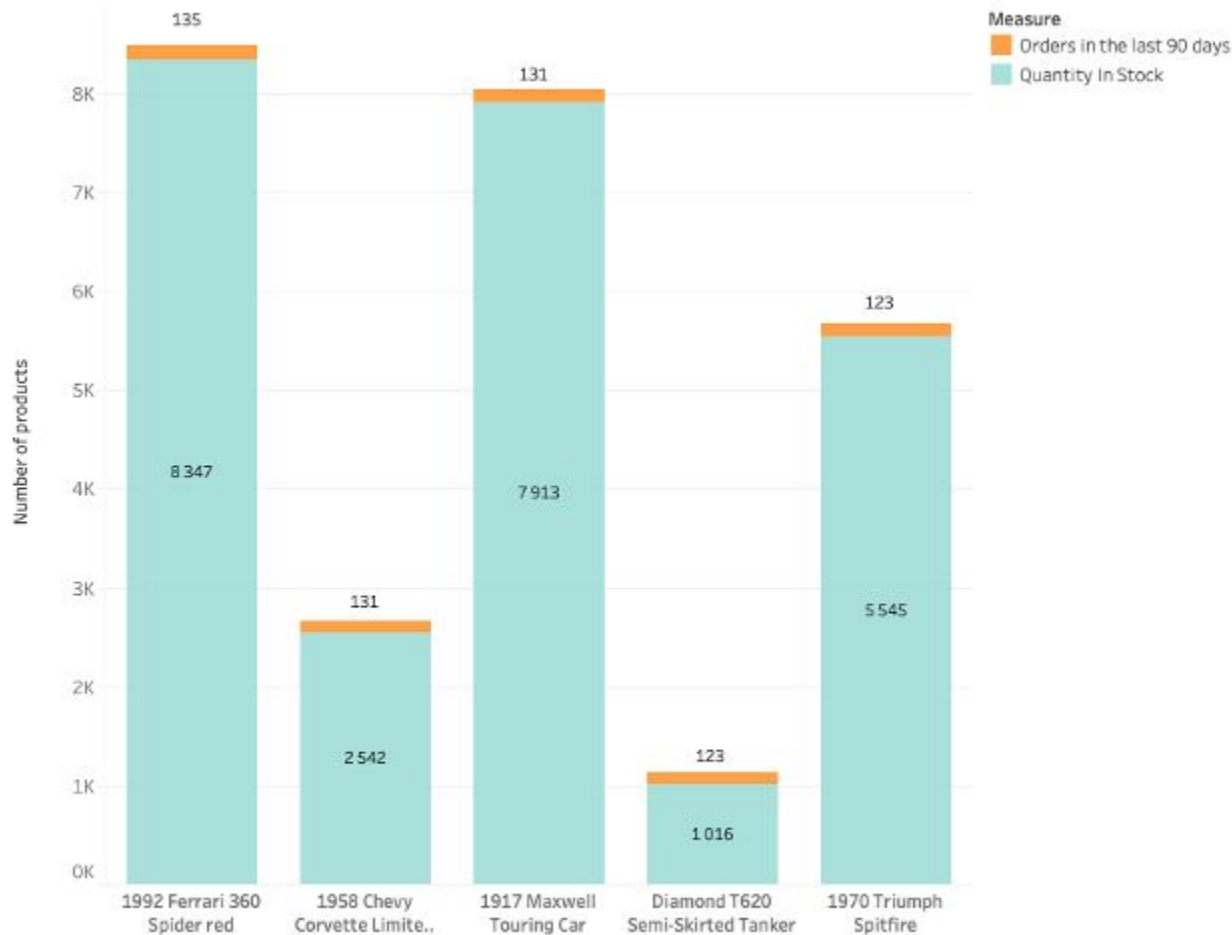


Logistics

KPI: The stock of the 5 most ordered products in the current month and the last 2 months

Warning : for certain products, the quantities in stock are abnormal compared to the quantities ordered of the product. Meaning that there is costly overstock or a problem with stock update.

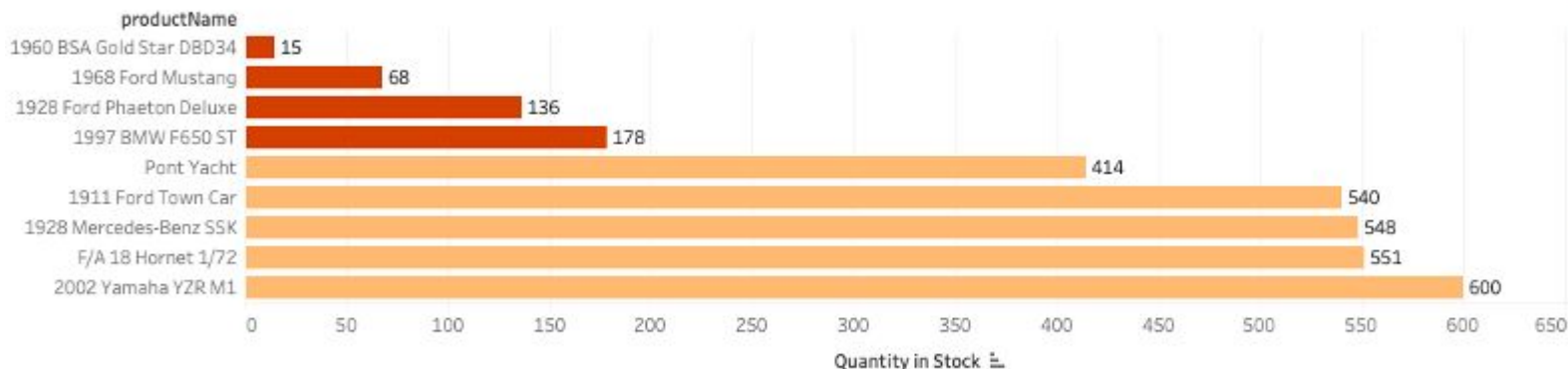
Stock - 5 most ordered products



Logistics: Our recommendations

Suggested KPIs: Create an alert for products where the stock is low (see visualization), can be done also for overstock.

Products with low stock (< 600 units)



limit : only group information because it is not possible to obtain information by warehouse



KPI HR



Human Resources

KPI: Each month, the 2 sellers with the highest turnover

Team - Last month top 2 sellers with turnover

Hernandez Gerard	Jennings Leslie
101 923	74 525

Notes :

- KPI filtered on last month for HR needs for bonus for example
- what is the objective of the KPI? according to the answer, the filters need to be changed (by period, by country, by offices, ... ?)



Human Resources: Our recommendations

Suggested KPI: Top sellers by area with margin rate and turnover over the last 60 days

- we added the margin rate to have a more complete picture of the sales and allow you to act if there are problematic figures in the seller performances (can be highlighted by colors if needed)

Team - Top sellers by area with margin rate and turnover (last 60 days)

territory	name	Turnover	Margin rate
APAC	Fixter Andy	51 281	39,53
	Marsh Peter	33 593	36,51
EMEA	Hernandez Gerard	247 194	40,21
	Bott Larry	70 373	40,02
	Bondur Loui	64 585	38,66
	Jones Barry	27 967	41,28
	Castillo Pamela	8 807	42,05
Japan	Nishi Mami	37 484	32,35
NA	Jennings Leslie	182 612	39,24
	Patterson Steve	30 294	42,12
	Thompson Leslie	3 453	23,81



Final recommendations



Database and current data limitations

- No database documentation
- Database structure and table connection issues
- Missing fields and data



Recommendations

- Write a documentation for the database
- Improve the database structure
 - ◆ Add an invoices table and a “payment term” field in customers table
 - ◆ Link payments to invoices table and not customers
 - ◆ Add a warehouse table
 - ◆ Improve the link of customers with offices
- Develop more short-term KPIs (quarterly or monthly)
- Regularly check the dashboard to identify current needs



Next steps to improve your data experience

In the next steps of our work on your dashboard, we could:

- Improve the time consistency of the indicators
- Provide advice on the type of indicators to use, incl. our suggested KPIs
- Create a dashboard per department
- Include your suggestions



Thank you for your attention

We are happy to answer your questions!

