

#cheatsheet

3 SIMPLE WAYS TO ANALYSE YOUR DATA

Overview

Your data analysis cheat sheet to improve performance

1. **Time series analysis** - e.g. take time frame (week, day, month) on the x axis and another metric on the y axis like CPC's or CPA.
2. **Correlation analysis** - e.g you plot metric 1 on the x axis and metric 2 on the y axis with the commonality maybe date or week or month.
3. **Comparison analysis** - e.g. plot the dimensions you want to compare on one axis and the metric you want to compare them on the other axis.



1. Time series analysis

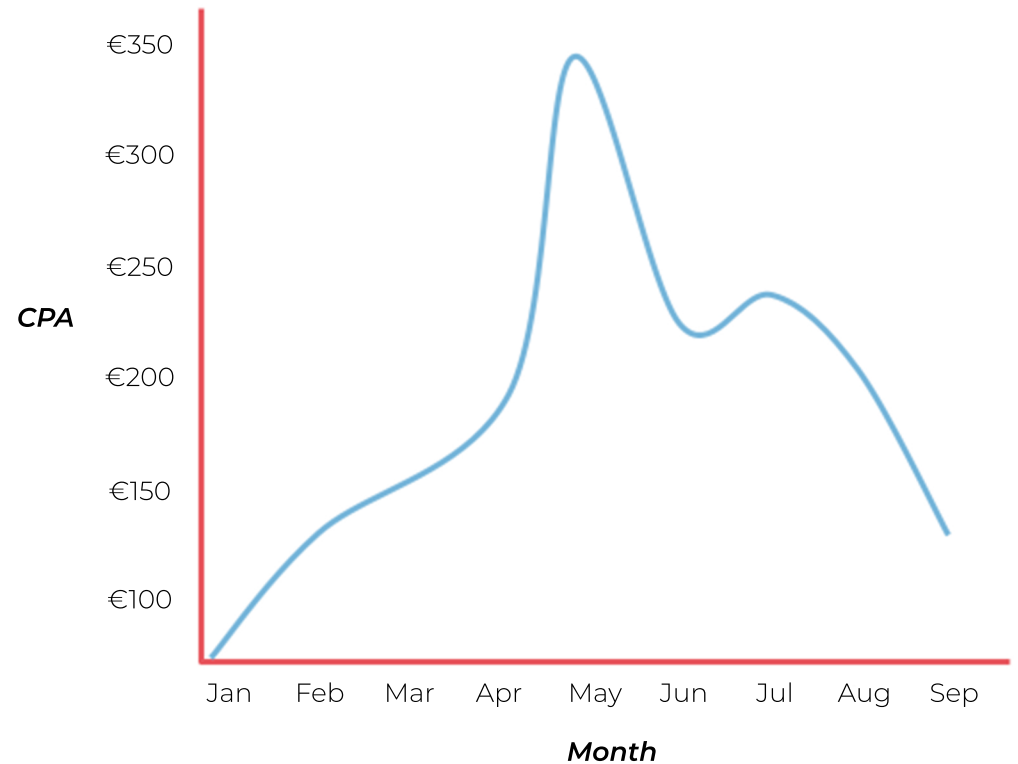
Get a holistic view of your performance metrics over time

A time series analysis of some of your key KPIs will help you identify things like:

Seasonality, anomalies, strong performance, poor performance.

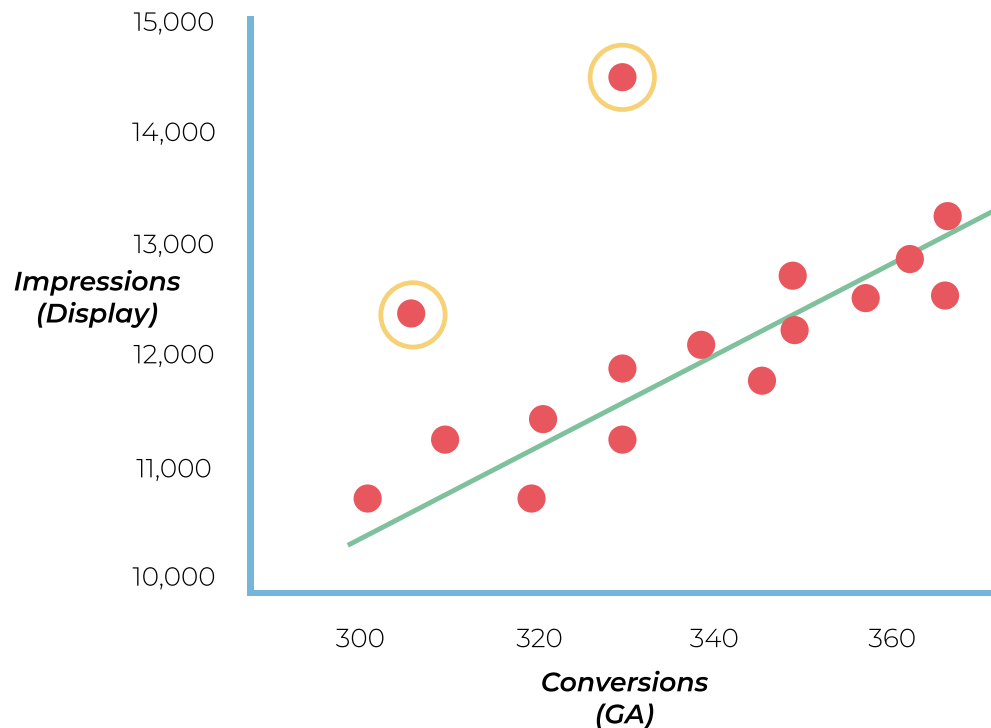
Ultimately, this kind of chart will highlight areas for you to do deeper analysis on.

Looking at this chart, an example could be, **what caused CPA to go up so high in May, or what caused it to go down in August and September.**



2. Correlation analysis

Identify links/relationships between two things



Ultimately you want to prove causation, but the first step is to identify if there is a relationship between two things before you can prove one causes the other.

As you can see in the chart, apart from two outliers (circled), there **seems to be a correlation between number of display impressions and conversions in Google Analytics.**

A typical step following this analysis would be to try and prove causation with a simple A/B test, geo-test or a before and after.

Alternatively, a more aggressive approach could be **optimizing towards impressions on display.**

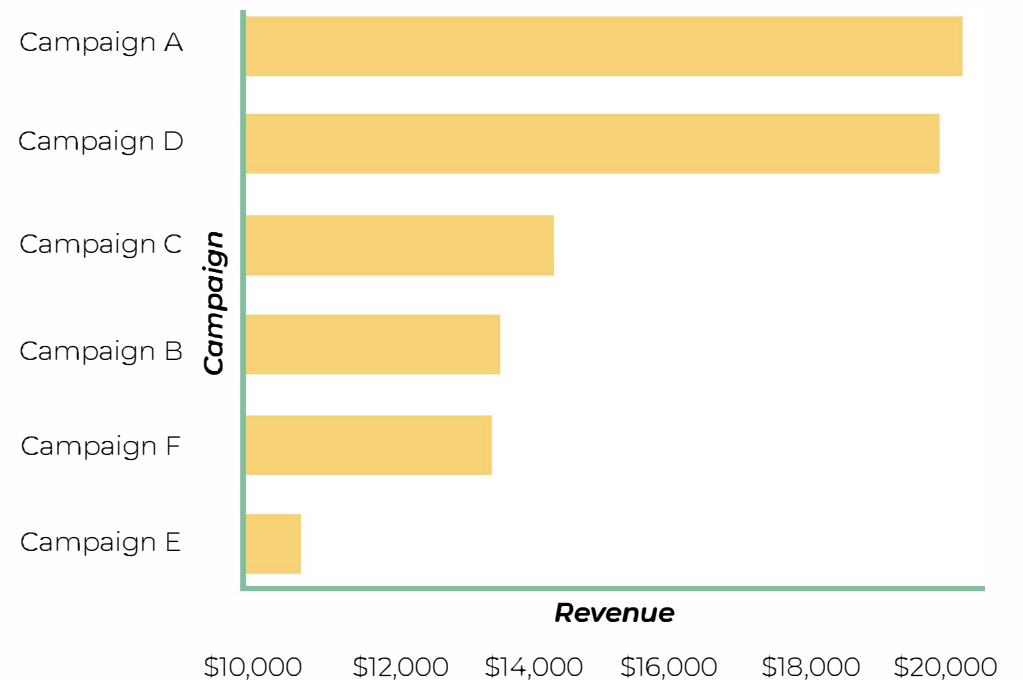
3. Comparison analysis

Compare the performance of two or more data points

“Which campaign brought in the most revenue for the business?” - a common question marketers face from management.

In this example, **the chart shows how much revenue each campaign brought in.** But you could look at any number of things side by side.

A common next step from here would be to **explore why campaign A and D brought in much more revenue than the rest of the campaigns.** Was it the creatives used? The messaging? The platforms?



Cheat sheet:

Time series analysis - e.g. take time frame (week, day, month) on the x axis and another metric on the y axis like CPC's or CPA. **This type of analysis allows you to answer questions like: what happens to CPC's or CPA's over time?**

Correlation analysis - e.g you plot metric 1 on the x axis and metric 2 on the y axis with the commonality maybe date or week or month. **This allows you to identify if there a link/relationship between two things, like If you increase impressions in display activity do conversions increase?**

Comparison analysis - e.g. plot the dimensions you want to compare on one axis and the metric you want to compare them on the other axis. **This allows you to look at two or more different things and see how they compare. For instance, out of the total revenue generated for a campaign, which platforms performed better and which lower than average?**

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