



# EXPLORATORY DATA ANALYSIS

## = check list =



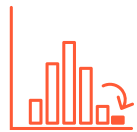
### Hypothesis

what are your assumptions  
ask yourself questions



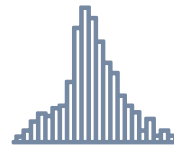
### Understanding

Browse the data, columns and data types  
check your domain knowledge



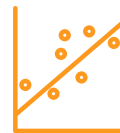
### Clean

deal with missing values,  
why are they missing?  
extreme values..  
are they really outliers?



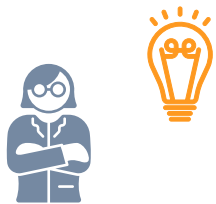
### Explore

look for groups, skewness, unexpected  
centrality and spread, re-express  
your data if needed: log, root,..



### Relationships

check for correlations between values  
are all correlations making sense?



### Back to the hypothesis

were your assumptions correct?  
did you tackle the right questions?



### Explain

add explanations and overviews  
document your thought process..  
WHY did you do all the analysis?

**Fine tune**  
keep only relevant and non-redundant  
plots, check that all plots  
are clear and self explanatory

*"The greatest value of a picture  
is when it forces us to notice  
what we never  
expected to see" ~John Tukey*

