

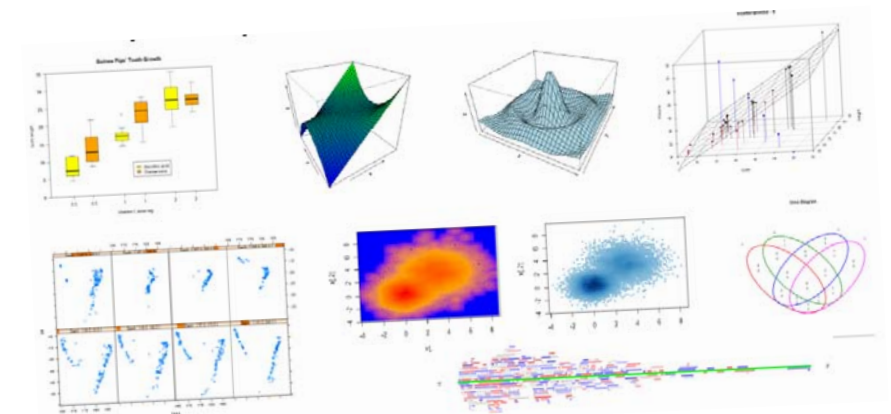
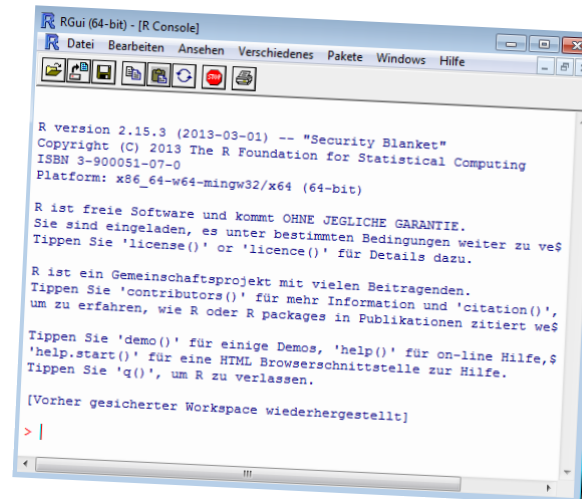
Is R the Right Tool for Me?

PhUSE 2015 - Peter Bewerunge

ACCOVION

What Is R?

R: The R Project for Statistical Computing
<https://www.r-project.org/> ▼ Diese Seite übersetzen
 R, also called GNU S, is a strongly functional language and environment to statistically explore data sets, make many graphical displays of data from custom ...
 CRAN - FAQs - Manuals - Books

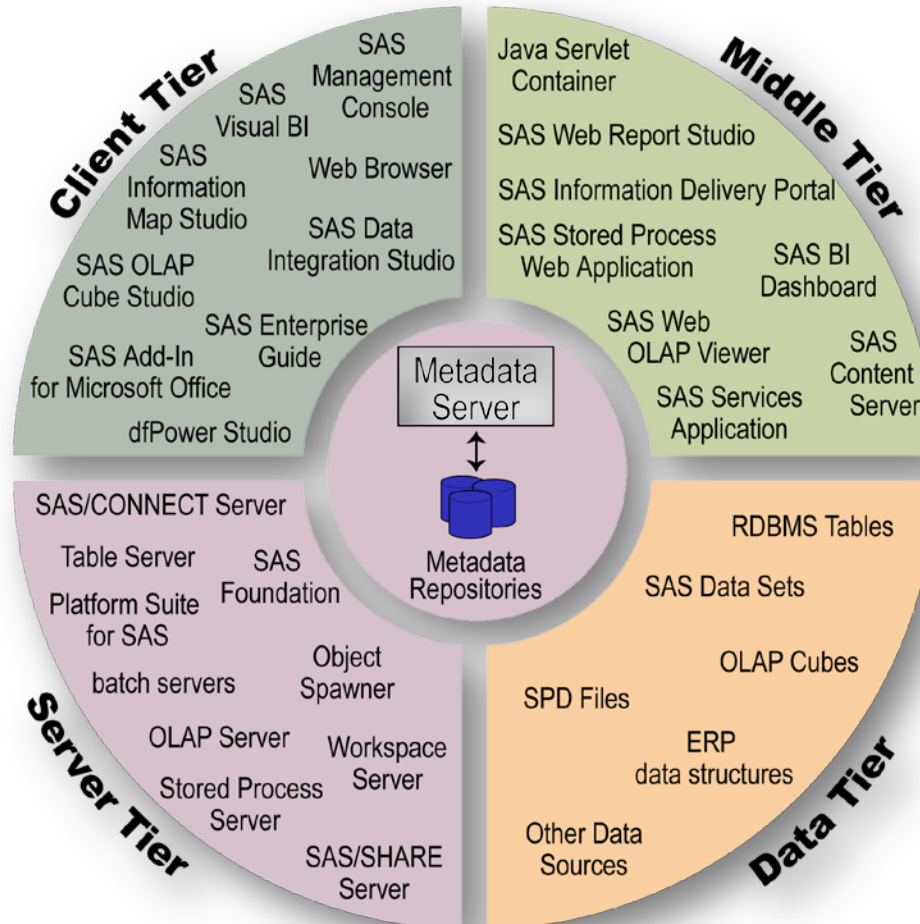


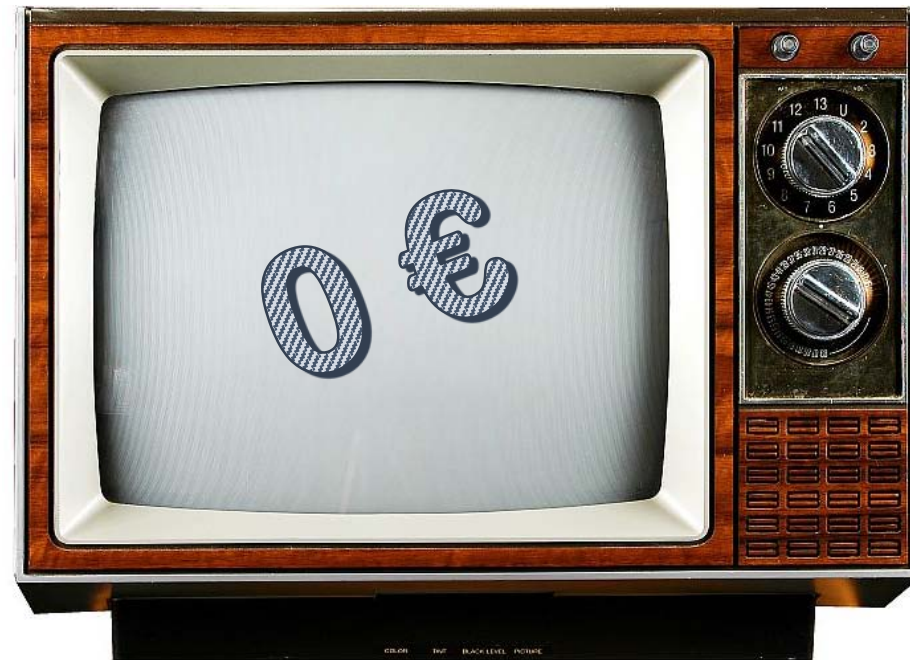
What Is R not?

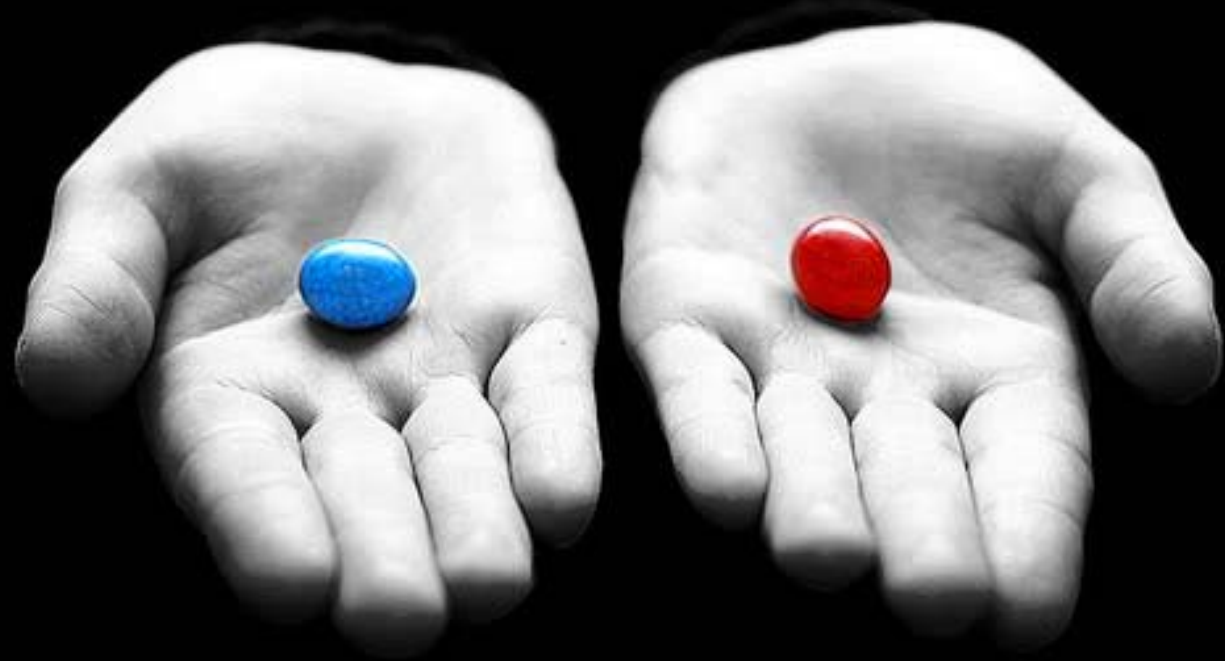


Gartner (February 2015)

What is R not?









PROS	CONS
① ~ ② ~ ③ ~	1) ~ 2) ~ 3) ~



PROS

free of charge

huge community

easy to use

state of the art

CONS

no support hotline

not validated...

... as every other software

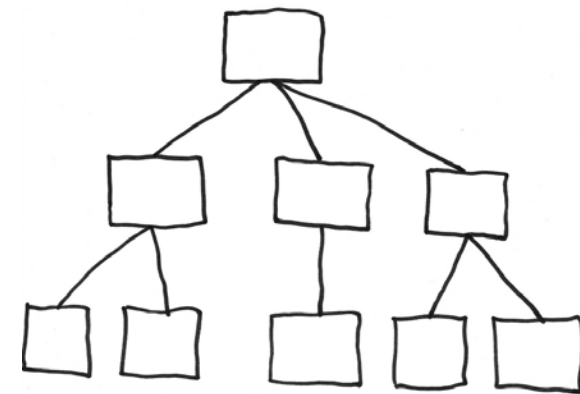
extra trainings

...

Analytic Hierarchy Process (AHP)

The **analytic hierarchy process (AHP)** is a structured technique for organizing and analyzing complex decisions, based on mathematics and psychology. It was developed by Thomas L. Saaty in the 1970s and has been extensively studied and refined since then.

From Wikipedia, the free encyclopedia



Analytic Hierarchy Process (AHP)

The aim is..

- to find decisions in teams
- to reduce time and costs
- to make traceable results
- to detect inconsistency

Helps to...

- review subjective decisions
- make weighted decisions
- build up a hierarchical structure via a decision tree



Phase I: Collect Data

- a) Define the question: „which software tool is the best for me?“
- b) Collect all criteria (unsorted)
 - Costs
 - Validation process
 - Training efforts
 - Documentation
 - ...
- c) Solutions: Use of...
 - R
 - SAS
 - Revolution R
 - IBM SPSS

Phase II: Compare & Weight

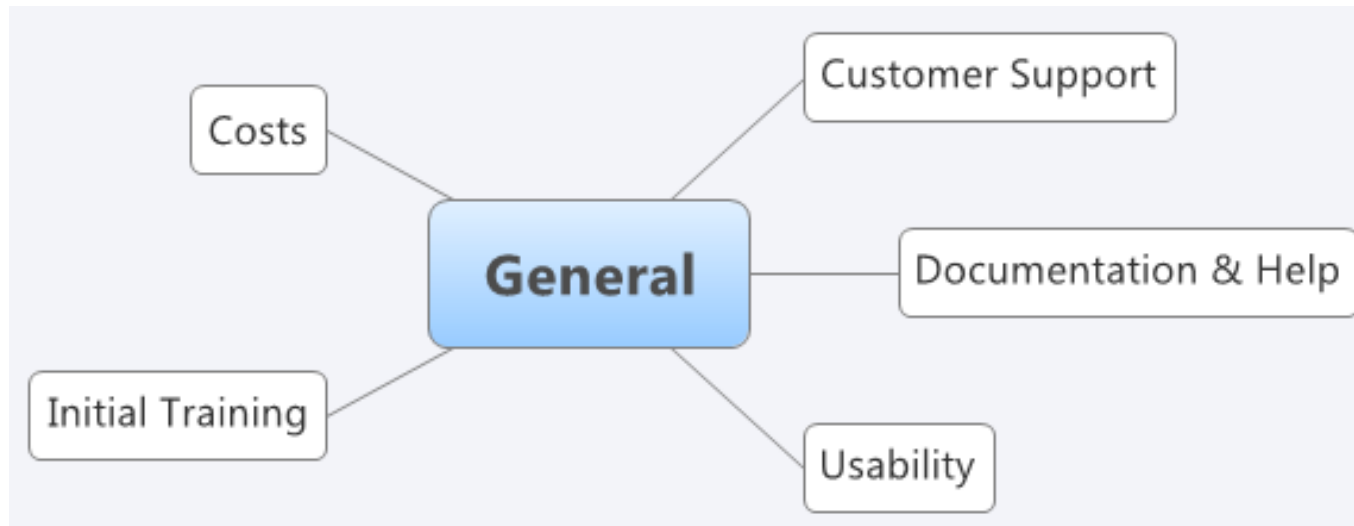
- Compare every criteria with all others
- Pairwise Comparison
 - rate which criteria is more important

Values	Meaning
1	same meaning
3	little bit more important
5	higher importance
7	definitely higher importance
9	much higher importance

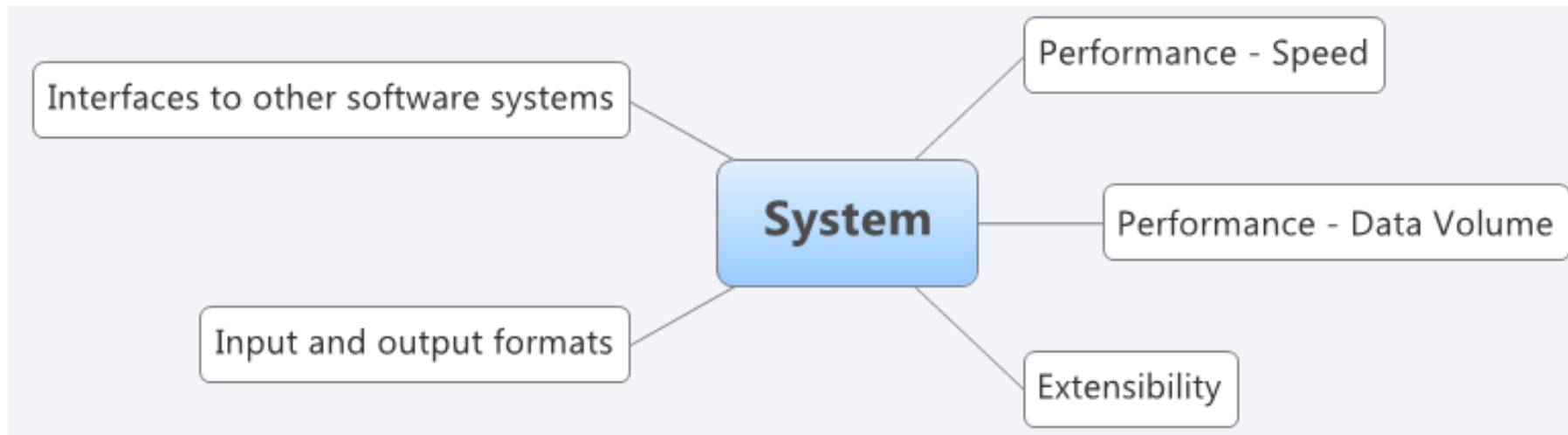
Phase III: Process Data



Phase III: Process Data



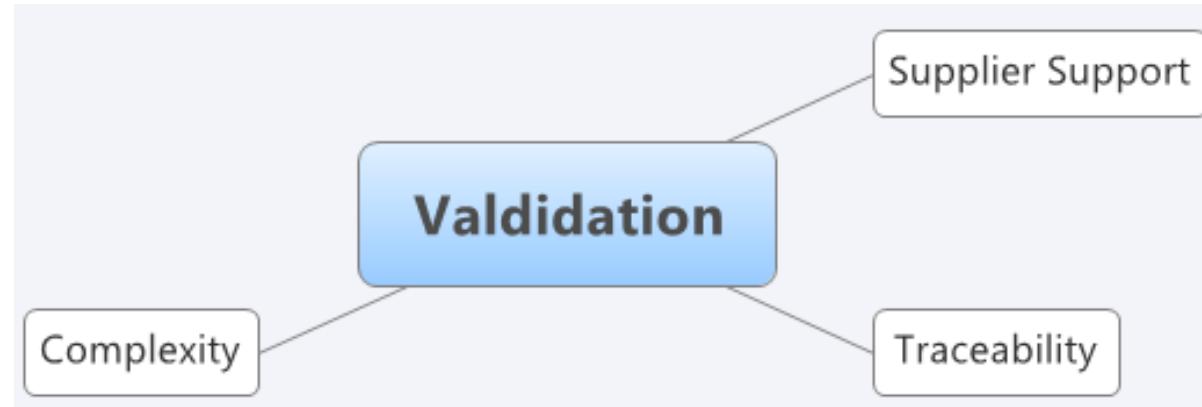
Phase III: Process Data



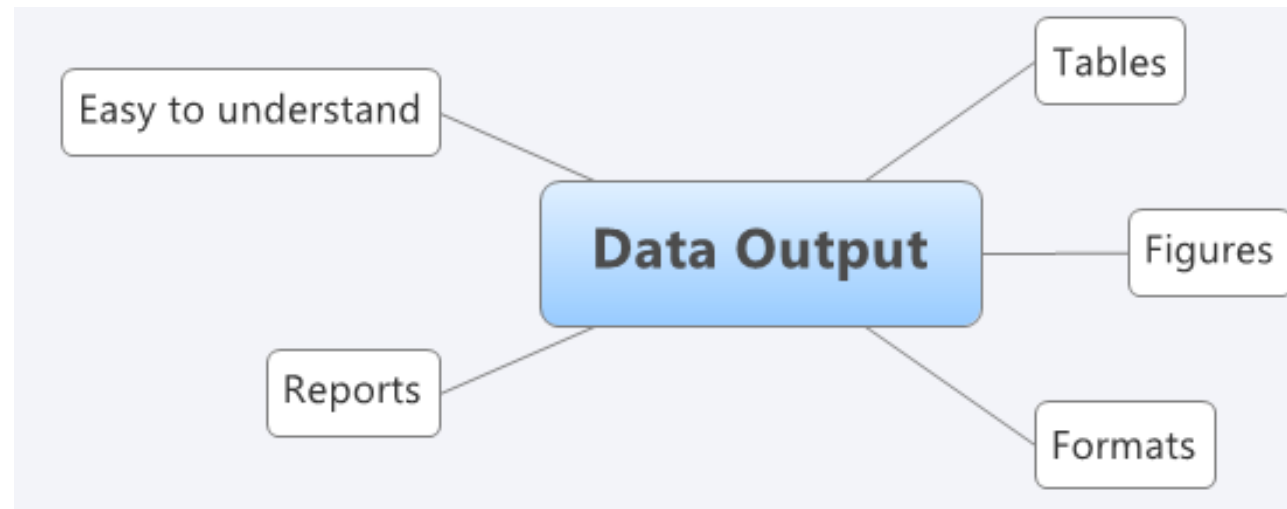
Phase III: Process Data



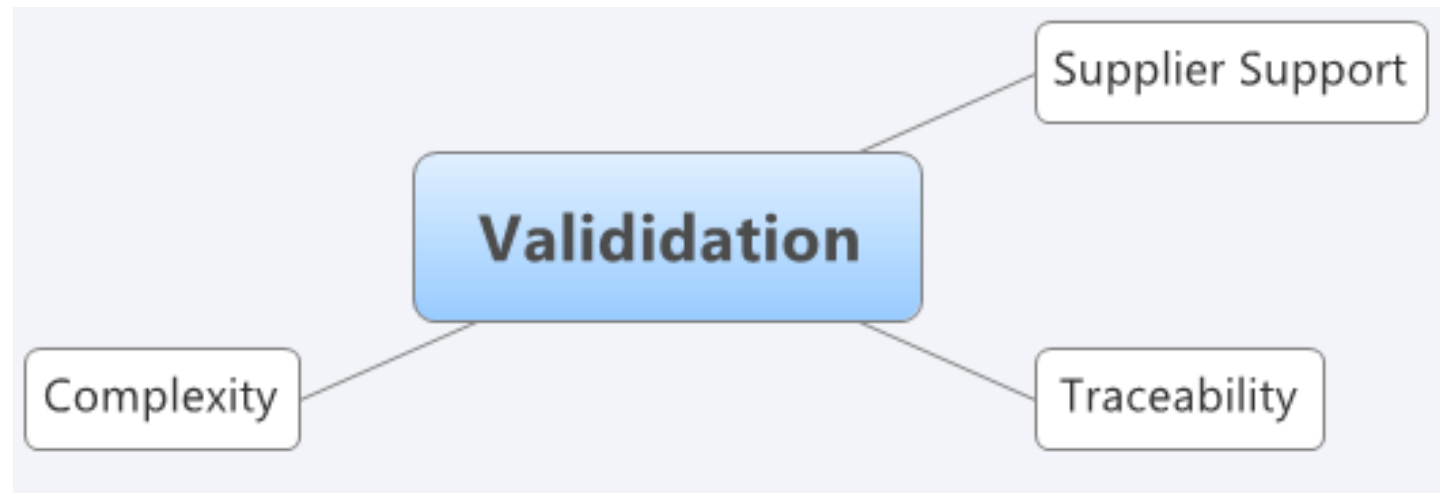
Phase III: Process Data



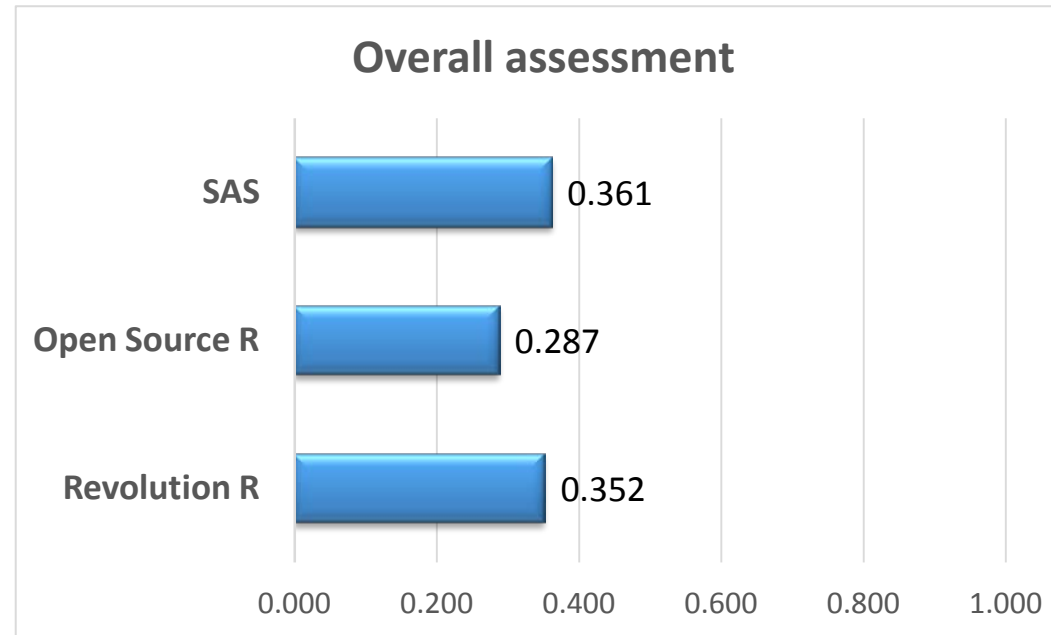
Phase III: Process Data

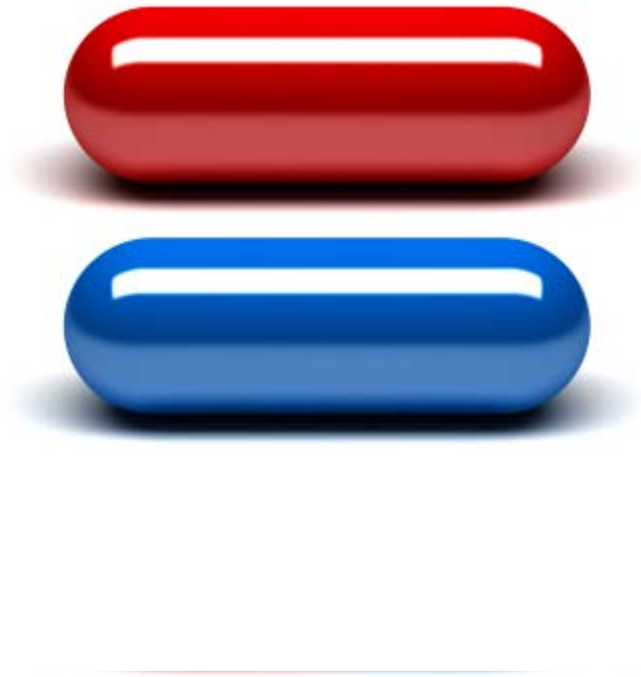


Phase III: Process Data



Phase III: Process Data





Thank you