



# Rule Management

UNECE Workshop on Statistical Data Editing

Mark van der Loo | @markvdloo | [mpj.vanderloo@cbs.nl](mailto:mpj.vanderloo@cbs.nl) | [github.com/markvanderloo](https://github.com/markvanderloo)

October 2022



Spending quality time  
learning:

1. AWS
2. Docker
3. K8S
- 4 Cloud technology.

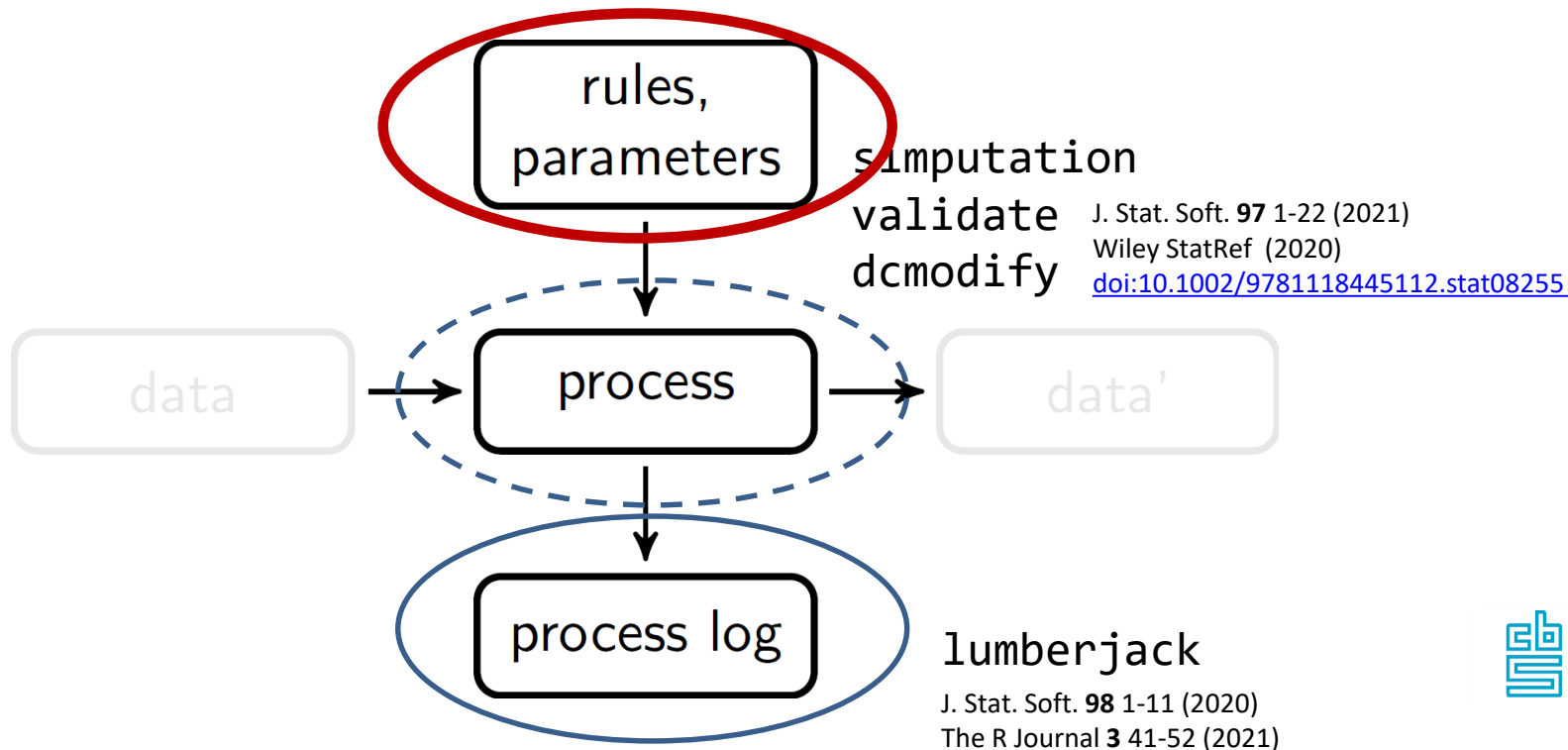


made with GIMP by @nixCraft



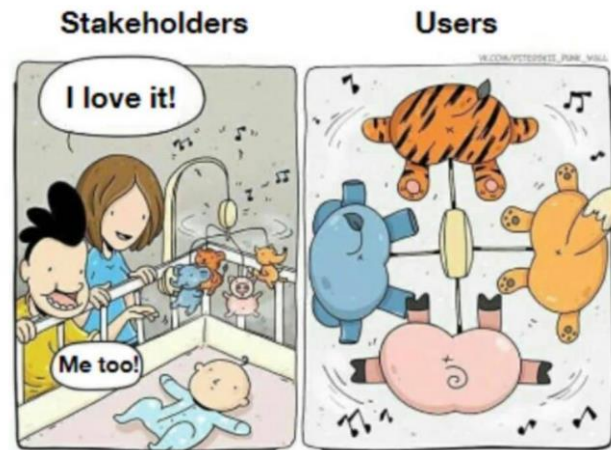
Drawing pictures of clouds  
and becoming an architect

# Modular production systems



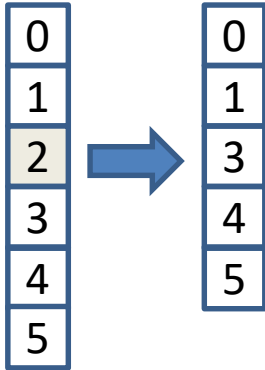
# Rule management: user stories

- CRUD
- Select Rules
- Determine Rule order
- Time travel
- Handle transient data circumstances

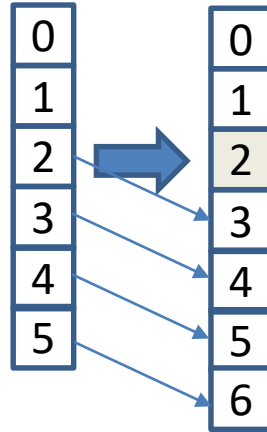


# Rule order *rules*

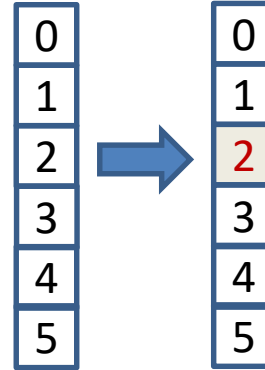
Remove



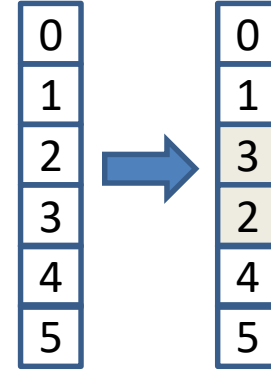
Insert



Replace



Transpose




# Rule management: user stories

- CRUD
- Select Rules
- Determine Rule order

List operations

- Time travel
- Handle transient data circumstances

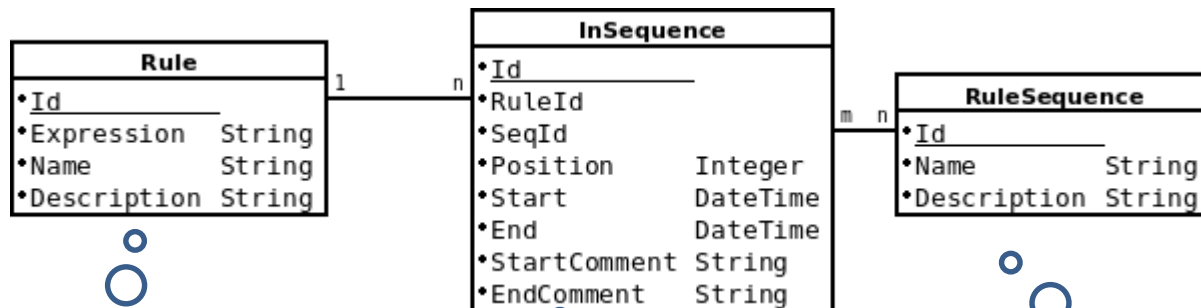
List operations as pure functions



Create a new copy  
after each operation  
(and label it)



# Database implementation



Set of all rules

Where and  
when does a  
rule occur in  
which list

Names of lists  
(e.g. SBS, NA)



# Summary

- Central data structure:
  - List (versions) of Rule Sequences
- Can be implemented in database
  - But takes some care





# R package rulemanager (PoC)



R functions executing SQL on an SQLite database