VedaR – an R package for analysing TIMES data

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R – what and why?

- Language and environment for statistical computing and graphics
- Flexible: users write code to meet requirements
- Powerful: tens of thousands of packages (and growing)
- Open-source: anyone can contribute to development

R-environment

Input data  Output data
R-packages
User-scripts

Communication
- Complete reports
- Websites
- Interactive dashboards

Reproducible analysis: Anyone with input data + scripts can replicate results

https://rviews.rstudio.com/2017/06/08/what-is-the-tidyverse/
Veda-TIMES workflow

Data and Assumptions

Model Output

Output post-processing/presentation

Modeler

Veda2.0

User interface

TIMES

GAMS

Solvers

Model
VedaR

https://github.com/DataScienceScotland/vedar

**Import**
- `import_vd()`
- `import_vde()`
- `import_vds()`
- `prep_data()`
- `define_sector_from_list()`

**Analysis**
- Any R-based analysis/data visualisation
- `make_graph_from_veda_df()`
- `check_in_path()`
- `make_res()`
- `syscost()`
Using R and VedaR

Requirements

1. **R (v3.6.3 or later)**
2. **RStudio**: Integrated development environment for using R
3. **Install VedaR**
4. **Install any additional packages as required** (`install.packages("package_name")`)
Demo
Keeping up to date with VedaR

• Under development
• Get notified of updates by watching repo (you will need to be logged in to your GitHub account)

• Refer to the vignette file(s) to learn how to use functions.
Open-source in the community

• Numerous additional features planned (see GitHub issues page)

• Anyone can contribute!
  o Contributions to code
  o Feedback on existing functions
    ▪ Issues/bugs
    ▪ Usability
  o Suggest additional functionality