

Package ‘cocosoR’

July 22, 2025

Title CoCoSo - Combined Compromise Solution Method for MCDA

Version 0.1.0

Description Provides a set of functions to implement the Combined Compromise Solution (Co-CoSo) Method created by Yazdani, Zarate, Zavadskas and Turskis (2019) <[doi:10.1108/MD-05-2017-0458](https://doi.org/10.1108/MD-05-2017-0458)>. This method is based on an integrated simple additive weighting and compromise exponentially weighted product model.

License GPL (>= 3)

Encoding UTF-8

Language en-US

RoxygenNote 7.2.3

Depends R (>= 2.10)

LazyData true

Suggests knitr, rmarkdown, testthat (>= 3.0.0)

VignetteBuilder knitr

Config/testthat/edition 3

NeedsCompilation no

Author Sergio Floquet [aut, cre] (ORCID:
<<https://orcid.org/0000-0002-7998-350X>>),
Marcos Santos [aut] (ORCID: <<https://orcid.org/0000-0003-1533-5535>>)

Maintainer Sergio Floquet <sergiofloquet@hotmail.com>

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check_input_data_cocoso

Verify if the dataset to be submitted to cocoso function is correctly formatted.

Description

Verify if the dataset to be submitted to cocoso function is correctly formatted.

Usage

```
check_input_data_cocoso(md_data)
```

Arguments

md_data	Must be a data frame with information about Criteria, Alternatives and Optimal Value. See example_cocoso.
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Value

True if the dataset is correctly formatted and False otherwise.

Examples

```
data(example_cocoso)
check_input_data_cocoso(example_cocoso)
```

cocoso

Implementation of CoCoSo Method

Description

Implementation of CoCoSo Method

Usage

```
cocoso(md_data, parameter_alpha = 0.5)
```

Arguments

md_data	Must be a data frame with information about Criteria, Alternatives and Optimal Value. See example_cocoso.
parameter_alpha	Parameter for third aggregation strategies.

Value

Final ranking of all alternatives from CoCoSo method. In addition, we compute and present all three aggregation strategies.

Examples

```
data(example_cocoso)
cocoso(example_cocoso)
```

example_cocoso	<i>Data example of logistic provider selection problem.</i>
----------------	---

Description

Information of decision-making matrix from a logistic provider selection problem including information about criteria, alternatives and weights.

Usage

```
example_cocoso
```

Format

A data frame with 10 rows and 6 columns.

Source

Extract in "A combined compromise solution (CoCoSo) method for multi-criteria decision-making problems", Yazdani, M., Zarate, P., Kazimieras Zavadskas, E., & Turskis, Z. (2019).

Examples

```
example_cocoso
```

standard_cocoso	<i>Padronization of decision-making matriz by sum.</i>
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Description

Padronization of decision-making matriz by sum.

Usage

```
standard_cocoso(md_data)
```

Arguments

md_data	Decision-making matrix.
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Value

A Decision-making matrix normalize.

Examples

```
standard_cocoso(mtcars)
```

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