

# Package ‘cocosoR’

June 28, 2023

**Title** Implementation of CoCoSo (Combined Compromise Solution) method that it a combined compromise decision-making algorithm.

**Version** 0.1.0

**Description** This program is an implementation of the Combined Compromise Solution (Co-CoSo) Method (A combined compromise solution (CoCoSo) method for multi-criteria decision-making problems, Yazdani, M., Zarate, P., Kazimieras Zavadskas, E., & Turskis, Z. (2019), <<https://doi.org/10.1108/MD-05-2017-0458>> ) based on an integrated simple additive weighting and compromise exponentially weighted product model.

**License** GPL (>= 2)

**Encoding** UTF-8

**Roxygen** list(markdown = TRUE)

**RoxygenNote** 7.2.3

**Depends** R (>= 2.10)

**LazyData** true

**Suggests** knitr,  
rmarkdown,  
testthat (>= 3.0.0)

**VignetteBuilder** knitr

**Config/testthat/edition** 3

**Year** 2023

## R topics documented:

check_input_data_cocoso . . . . .	2
cocoso . . . . .	2
example_cocoso . . . . .	3
standard_cocoso . . . . .	4

<b>Index</b>	<b>5</b>
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check\_input\_data\_cocoso

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

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### Description

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

### Usage

```
check_input_data_cocoso(md_data = example_cocoso)
```

### 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

```
check_input_data_cocoso(md_data = example_cocoso)
```

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cocoso

*Implementation of CoCoSo Method*

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### Description

Implementation of CoCoSo Method

### Usage

```
cocoso(example_cocoso, 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**

```
cocoso(example_cocoso)
```

---

example\_cocoso

*Data example of logistic provider selection problem.*

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**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), <https://doi.org/10.1108/MD-05-2017-0458>.

**Examples**

```
example_cocoso
```

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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)
```

# Index

## \* **datasets**

example\_cocoso, [3](#)

check\_input\_data\_cocoso, [2](#)

cocoso, [2](#)

example\_cocoso, [3](#)

standard\_cocoso, [4](#)