Package 'cocosoR'

July 6, 2023

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>. 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

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Repository CRAN

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R topics documented:

```
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.

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   *Data example of logistic provider selection problem.*

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   *Padronization of decision-making matriz by sum.*

Description

Padronization of decision-making matriz by sum.

Usage

```
standard_cocoso(md_data)
```

Arguments

md_data   Decision-making matrix.

Value

A Decision-making matrix normalize.

Examples

```
standard_cocoso(mtcars)
```

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