

Package ‘visualisationIMPACT’

December 10, 2019

Type Package

Title Functions for different type of output (visualisation)

Version 0.1.0

Description Functions to create different ouputs standardize IMPACT style

License GPL-3

Encoding UTF-8

LazyData true

Suggests testthat,
rmarkdown

VignetteBuilder knitr

RoxygenNote 6.1.1

Imports knitr,
dplyr,
extrafont,
magrittr

Depends ggplot2,
ggthemes,
rlang

R topics documented:

| | |
|--|---|
| add_outlier_boxplot | 2 |
| add_percent_format | 2 |
| add_stat_to_boxplot | 3 |
| barchart_impact | 3 |
| boxplot_impact | 4 |
| errorbar_impact | 5 |
| grouped_barchart_impact | 5 |
| grouped_boxplot_impact | 6 |
| hello | 7 |
| reach_style_color_beige | 7 |
| reach_style_color_beiges | 7 |
| reach_style_color_darkgrey | 7 |
| reach_style_color_darkgreys | 8 |
| reach_style_color_lightgrey | 8 |
| reach_style_color_lightgreys | 8 |

| | |
|----------------------------------|----|
| reach_style_color_red | 8 |
| reach_style_color_reds | 9 |
| sens_barchart | 9 |
| theme_impact | 10 |

| | |
|--------------|-----------|
| Index | 11 |
|--------------|-----------|

| | |
|---------------------|--------------------------------------|
| add_outlier_boxplot | <i>Create a barchart for average</i> |
|---------------------|--------------------------------------|

Description

Create a barchart for average

Usage

add_outlier_boxplot(theplot, x, y, type.boxplot, group = group)

Arguments

- theplot: ggplot
- x: element of .data that contains the different values of the categorical data

Value

a ggplot object

| | |
|--------------------|---------------------------------------|
| add_percent_format | <i>Add percent format to a ggplot</i> |
|--------------------|---------------------------------------|

Description

Add percent format to a ggplot

Usage

add_percent_format(theplot)

Arguments

- theplot: ggplot to which add percent format

Value

a ggplot object

| | |
|---------------------|---|
| add_stat_to_boxplot | <i>Add statistics values on boxplot</i> |
|---------------------|---|

Description

Add statistics values on boxplot

Usage

```
add_stat_to_boxplot(theplot, x, whisker_min, whisker_max, median)
```

Arguments

| | |
|--------------|---|
| theplot: | ggplot |
| x: | element of .data that contains the different values of the categorical data |
| whisker_min: | element of .data containing the value of the lower whisker. Usually calculated as 1.5*IQR smallest value from the hinge |
| whisker_max: | element of .data containing the value of the upper whisker. Usually calculated as 1.5*IQR largest value from the hinge |
| median: | element of .data containing the median values |

Value

a ggplot object

| | |
|-----------------|--------------------------------------|
| barchart_impact | <i>Create a barchart for average</i> |
|-----------------|--------------------------------------|

Description

Create a barchart for average

Usage

```
barchart_impact(.data, x, y, infimum_error = NULL,
  supremum_error = NULL, sens.barchart = "vertical", percent = FALSE)
```

Arguments

| | |
|----------------|--|
| infimum_error | (optional): column name (without quotes) of .data containing value of the lower limit for the error bars |
| supremum_error | (optional): column name (without quotes) of .data containing value of the upper limit for the error bars |
| sens.barchart | (optional): if sens.barchart = "vertical" (default) boxplots are build with vertical cartesian coordinates. If sens.barchart="horizontal" flip cartesian coordinates so that vertical becomes horizontal |
| percent | (optional): logical parameter. Default value is FALSE. If TRUE, y values are written as percentages |

| | |
|--------|---|
| .data: | data that contains the result for the barchart (percents or averages) |
| x: | column name (without quotes) of .data that contains the different values of the categorical data. |
| y: | column name (without quotes) .data containing for x element the y coordinates |

Value

a ggplot object

| | |
|----------------|--|
| boxplot_impact | Create boxplot standardize with IMPACT style |
|----------------|--|

Description

Create boxplot standardize with IMPACT style

Usage

```
boxplot_impact(.data, x, name.y, median, first_quantile, third_quantile,
  whisker_min, whisker_max, outlier_min = NULL, outlier_max = NULL,
  sens.boxplot = "vertical")
```

Arguments

| | |
|-----------------|--|
| outlier_min | (optional): element of .data containing the most extreme value beyond the lower whisper. |
| outlier_max | (optional): element of .data containing the most extreme value beyond the upper whisper. |
| sens.boxplot | (optional): if sens.boxplot = "vertical" (default) boxplots are build with vertical cartesian coordinates. If sens.boxplot="horizontal" flip cartesian coordinates so that vertical becomes horizontal |
| .data: | data that contains the statistical result to build boxplots |
| x: | element of .data that contains the different values of the categorical data |
| name.y: | name of value calculated |
| median: | element of .data containing the median values |
| first_quantile: | element of .data containing lower hinges correspond to the first quartile |
| third_quantile: | element of .data containing upper hinges correspond to the third quartile |
| whisker_min: | element of .data containing the value of the lower whisker. Usually calculated as 1.5*IQR smallest value from the hinge |
| whisker_max: | element of .data containing the value of the upper whisker. Usually calculated as 1.5*IQR largest value from the hinge |

Details

Create a plot with one or multiple boxplot standardize with IMPACT colors, fonts, ... for the same numerical variable

Value

a ggplot object

| | |
|-----------------|------------------------------|
| errorbar_impact | <i>Error bar standardize</i> |
|-----------------|------------------------------|

Description

Error bar standardize

Usage

```
errorbar_impact(plot_without_errorbar, measure, lower_limit, upper_limit,
  text_angle)
```

Value

a ggplot object

| | |
|-------------------------|----------------------------------|
| grouped_barchart_impact | <i>Create a grouped barchart</i> |
|-------------------------|----------------------------------|

Description

Create a grouped barchart

Usage

```
grouped_barchart_impact(.data, x, subset.x, y, infimum_error = NULL,
  supremum_error = NULL, sens.barchart = "vertical", percent = FALSE)
```

Arguments

| | |
|-----------------|--|
| infimum_error | (optional): column name (without quotes) of .data containing value of the lower limit for the error bars |
| supremum_error | (optional): column name (without quotes) of .data containing value of the upper limit for the error bars |
| sens.barchart | (optional): if sens.barchart = "vertical" (default) boxplots are build with vertical cartesian coordinates. If sens.barchart="horizontal" flip cartesian coordinates so that vertical becomes horizontal |
| percent | (optional): logical parameter. Default value is FALSE. If TRUE, y values are written as percentages |
| .data: | data that contains the result for the barchart (percents or averages) |
| x: | column name (without quotes) of .data that contains the different values of the categorical data |
| y: | column name (without quotes) .data containing for x element the y coordinates |
| result_percent: | data.frame of two column where the first is the values of the independent var and the second column is the average associated to the indepedent variable value |

grouped_boxplot_impact

Create a plot with grouped boxplot with standadize IMPACT style

Description

Create a plot with grouped boxplot with standadize IMPACT style

Usage

```
grouped_boxplot_impact(.data, x, subset.x, name.y, median, whisker_min,
  whisker_max, first_quantile, third_quantile, outlier_min = NULL,
  outlier_max = NULL, sens.boxplot = "vertical")
```

Arguments

| | |
|-----------------|--|
| outlier_min | (optional): element of .data containing the most extreme value beyond the lower whisper. |
| outlier_max | (optional): element of .data containing the most extreme value beyond the upper whisper. |
| sens.boxplot | (optional): if sens.boxplot = "vertical" (default) boxplots are build with vertical cartesian coordinates. If sens.boxplot="horizontal" flip cartesian coordinates so that vertical becomes horizontal |
| .data: | data that contains the statistical result to build boxplots |
| x: | element of .data that contains the different values of the categorical data |
| subset.x: | element containing all the subset categories of x. |
| name.y: | name of value calculated |
| median: | element of .data containing the median values |
| first_quantile: | element of .data containing lower hinges correspond to the first quartile |
| third_quantile: | element of .data containing upper hinges correspond to the third quartile |
| whisker_min: | element of .data containing the value of the lower whisher. Usually calculated as 1.5*IQR smallest value from the hinge |
| whisker_max: | element of .data containing the value of the upper whisher. Usually calculated as 1.5*IQR largest value from the hinge |

Details

Create a plot with one or multiple boxplot standardize with IMPACT colors, fonts, ... for the same numerical variable

Value

a ggplot object

| | |
|-------|----------------------|
| hello | <i>Hello, World!</i> |
|-------|----------------------|

Description

Prints 'Hello, world!'.

Usage

```
hello()
```

Examples

```
hello()
```

| | |
|-------------------------|---------------------------|
| reach_style_color_beige | <i>reach brand beiges</i> |
|-------------------------|---------------------------|

Description

reach brand beiges

Usage

```
reach_style_color_beige(lightness = 1)
```

| | |
|--------------------------|----------------------------------|
| reach_style_color_beiges | <i>Reach brand beige triples</i> |
|--------------------------|----------------------------------|

Description

Reach brand beige triples

Usage

```
reach_style_color_beiges()
```

| | |
|----------------------------|-------------------------------|
| reach_style_color_darkgrey | <i>Reach brand dark greys</i> |
|----------------------------|-------------------------------|

Description

Reach brand dark greys

Usage

```
reach_style_color_darkgrey(lightness = 1)
```

reach_style_color_darkgreys
Reach brand dark grey triples

Description

Reach brand dark grey triples

Usage

reach_style_color_darkgreys()

reach_style_color_lightgrey
reach brand light greys

Description

reach brand light greys

Usage

reach_style_color_lightgrey(lightness = 1)

reach_style_color_lightgreys
Reach brand light greys triples

Description

Reach brand light greys triples

Usage

reach_style_color_lightgreys()

reach_style_color_red *Reach brand reds*

Description

Reach brand reds

Usage

reach_style_color_red(lightness = 1)

reach_style_color_reds

Reach brand reds triples

Description

Reach brand reds triples

Usage

```
reach_style_color_reds()
```

sens_barchart

Create a barchart for average

Description

Create a barchart for average

Usage

```
orientation_barchart(.data, independent.var, max_nbr_var, size_max_label)
```

Arguments

size_max_label integer for the maximum number of character of a label

.data: dataframe that contains the result for the barchart

independent.var.value: column of the dataframe .data thta contains the different values of the categorical data

max_nbr_var: integer for the maximum number of variable that fit on a vertical graph

Details

Searches for

Value

a ggplot object

Examples

```
...
```

| | |
|--------------|--|
| theme_impact | Create a grouped barchart for percentage |
|--------------|--|

Description

Create a grouped barchart for percentage

Usage

```
theme_impact()
```

Arguments

| | |
|-----------------|--|
| result_percent: | data.frame of two column where the first is the values of the independent var and the second column is the average associated to the indepedent variable value |
| result_min | optional: |
| result_max | optional: |
| save.file | optional: |
| ... | Other arguments passed on to the ggsave function |

Index

`add_outlier_boxplot`, [2](#)
`add_percent_format`, [2](#)
`add_stat_to_boxplot`, [3](#)

`barchart_impact`, [3](#)
`boxplot_impact`, [4](#)

`errorbar_impact`, [5](#)

`grouped_barchart_impact`, [5](#)
`grouped_boxplot_impact`, [6](#)

`hello`, [7](#)

`reach_style_color_beige`, [7](#)
`reach_style_color_beiges`, [7](#)
`reach_style_color_darkgrey`, [7](#)
`reach_style_color_darkgreys`, [8](#)
`reach_style_color_lightgrey`, [8](#)
`reach_style_color_lightgreys`, [8](#)
`reach_style_color_red`, [8](#)
`reach_style_color_reds`, [9](#)

`sens_barchart`, [9](#)

`theme_impact`, [10](#)