Package 'mschart'

June 26, 2019

Type Package

Title Chart Generation for 'Microsoft Word' and 'Microsoft PowerPoint' Documents

Version 0.2.4

Description Create native charts for 'Microsoft PowerPoint' and 'Microsoft Word' documents. These can then be edited and annotated. Functions are provided to let users create charts, modify and format their content. The chart's underlying data is automatically saved within the 'Word' document or 'PowerPoint' presentation. It extends package 'officer' that does not contain any feature for 'Microsoft' native charts production.

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Encoding UTF-8

LazyData true

Depends R (>= 2.10)

Imports stats, data.table, officer (>= 0.2.0), R6,cellranger, writexl,grDevices, xml2 (>= 1.1.0), htmltools

URL https://ardata-fr.github.io/mschart/

BugReports https://github.com/ardata-fr/mschart/issues

RoxygenNote 6.1.1

Suggests knitr, rmarkdown,magrittr

VignetteBuilder knitr

NeedsCompilation no

Author David Gohel [aut, cre],
YouGov [fnd],
David Camposeco [ctb] (chart_data_smooth function)

Maintainer David Gohel <david.gohel@ardata.fr>

Repository CRAN

Date/Publication 2019-06-26 09:10:02 UTC

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`as_bar_stack` *set a barchart as a stacked barchart*

Description

Apply settings to an `ms_barchart` object to produce a stacked barchart. Options are available to use percentage instead of values and to choose if bars should be vertically or horizontally drawn.

Usage

```
as_bar_stack(x, dir = "vertical", percent = FALSE, gap_width = 50)
```

Arguments

`x`	an `ms_barchart` object
`dir`	the direction of the bars in the chart, value must one of "horizontal" or "vertical".
`percent`	should bars be in percent
`gap_width`	gap width between the bar for each category on a bar chart, in percent of the bar width. It can be set between 0 and 500.

Examples

```
library(officer)

my_bar_stack_01 <- ms_barchart(data = browser_data, x = "browser",
  y = "value", group = "serie")
my_bar_stack_01 <- as_bar_stack( my_bar_stack_01 )

my_bar_stack_02 <- ms_barchart(data = browser_data, x = "browser",
  y = "value", group = "serie")
my_bar_stack_02 <- as_bar_stack( my_bar_stack_02, percent = TRUE,
  dir = "horizontal" )

doc <- read_pptx()
doc <- add_slide(doc, layout = "Title and Content", master = "Office Theme")
doc <- ph_with_chart(doc, chart = my_bar_stack_02)

fileout <- tempfile(fileext = ".pptx")
print(doc, target = fileout)
```

---

body_add_chart *add chart into a Word document*

Description

add a `ms_chart` into an rdocx object, the graphic will be inserted in an empty paragraph.

Usage

```
body_add_chart(x, chart, style = NULL, pos = "after", width = 5,
  height = 3)
```

Arguments

`x`	an rdocx object
`chart`	an `ms_chart` object.
`style`	paragraph style
`pos`	where to add the new element relative to the cursor, one of "after", "before", "on".
`height, width`	height and width in inches.

Examples

```
library(officer)
my_barchart <- ms_barchart(data = browser_data,
  x = "browser", y = "value", group = "serie")
my_barchart <- chart_settings( my_barchart, grouping = "stacked",
  gap_width = 50, overlap = 100 )
```

```
doc <- read_docx()
doc <- body_add_chart(doc, chart = my_barchart, style = "centered")
print(doc, target = "barchart_example.docx")
```

`browser_data` *Dummy dataset for barchart*

Description

A dataset containing 2 categorical and an integer variables:

Usage

```
data(browser_data)
```

Format

A data frame with 18 rows and 3 variables

Details

- browser web browser
- serie id of series
- value integer values

`browser_ts` *Dummy dataset for barchart*

Description

A dataset containing a date, a categorical and an integer variables:

Usage

```
data(browser_ts)
```

Format

A data frame with 36 rows and 3 variables

Details

- date date values
- browser web browser
- freq values in percent

chart_ax_x *axis settings*

Description

Define settings for an x or y axis.

Usage

```
chart_ax_x(x, orientation, crosses, cross_between, major_tick_mark,
  minor_tick_mark, tick_label_pos, display, num_fmt, rotation, limit_min,
  limit_max, position, second_axis = FALSE)

chart_ax_y(x, orientation, crosses, cross_between, major_tick_mark,
  minor_tick_mark, tick_label_pos, display, num_fmt, rotation, limit_min,
  limit_max, position, second_axis = FALSE)

## S3 method for class 'ms_chart'
chart_ax_x(x, orientation, crosses, cross_between,
  major_tick_mark, minor_tick_mark, tick_label_pos, display, num_fmt,
  rotation, limit_min, limit_max, position, second_axis = FALSE)

## S3 method for class 'ms_chart'
chart_ax_y(x, orientation, crosses, cross_between,
  major_tick_mark, minor_tick_mark, tick_label_pos, display, num_fmt,
  rotation, limit_min, limit_max, position, second_axis = FALSE)
```

Arguments

x	an ms_chart object.
orientation	axis orientation, one of 'maxMin', 'minMax'.
crosses	specifies how the axis crosses the perpendicular axis, one of 'autoZero', 'max', 'min'.
cross_between	specifies how the value axis crosses the category axis between categories, one of 'between', 'midCat'.
major_tick_mark, minor_tick_mark	tick marks position, one of 'cross', 'in', 'none', 'out'.
tick_label_pos	ticks labels position, one of 'high', 'low', 'nextTo', 'none'.
display	should the axis be displayed (a logical of length 1).
num_fmt	number formatting. See section for more details.
rotation	rotation angle. Value should be between -360 and 360.
limit_min	minimum value on the axis.
limit_max	maximum value on the axis.
position	position value that cross the other axis.
second_axis	unused

Methods (by class)

- `ms_chart`: chart_ax_x method for ms_chart objects
- `ms_chart`: chart_ax_y method for ms_chart objects

num_fmt

All `\%` need to be doubled, `0\%\%` mean "a number and percent symbol".

From my actual knowledge, depending on some chart type and options, the following values are not systematically used by office chart engine; i.e. when chart pre-compute percentages, it seems using `0\%\%` will have no effect.

- `General`: default value
- `0`: display the number with no decimal
- `0.00`: display the number with two decimals
- `0\%\%`: display as percentages
- `0.00\%\%`: display as percentages with two digits
- `#,##0`
- `#,##0.00`
- `0.00E+00`
- `# ?/?`
- `# ??/??`
- `mm-dd-yy`
- `d-mmm-yy`
- `d-mmm`
- `mmm-yy`
- `h:mm AM/PM`
- `h:mm:ss AM/PM`
- `h:mm`
- `h:mm:ss`
- `m/d/yy h:mm`
- `#,##0 ;(#,##0)`
- `#,##0 ;[Red](#,##0)`
- `#,##0.00;(#,##0.00)`
- `#,##0.00;[Red](#,##0.00)`
- `mm:ss`
- `[h]:mm:ss`
- `mmss.0`
- `##0.0E+0`
- `@`

chart_data_fill *Modify fill colour*

Description

Specify mappings from levels in the data to displayed fill colours.

Usage

```
chart_data_fill(x, values)
```

Arguments

x	an ms_chart object.
values	character(num of series|1): a set of colours values to map data values to. It is a named vector, the values will be matched based on the names. If it contains only one colour, this colour will be associated to all existing series.

See Also

chart_data_stroke, chart_data_symbol, chart_data_size

Examples

```
my_scatter <- ms_scatterchart(data = iris, x = "Sepal.Length",
  y = "Sepal.Width",  group = "Species")
my_scatter <- chart_data_fill(my_scatter,
  values = c(virginica = "#6FA2FF", versicolor = "#FF6161", setosa = "#81FF5B") )
```

chart_data_labels *Modify data labels settings*

Description

Data labels show details about data series. This function indicate that data labels should be displayed. See link{chart_labels_text} for modifying text settings associated with labels.

Usage

```
chart_data_labels(x, num_fmt = "General", position = "ctr",
  show_legend_key = FALSE, show_val = FALSE, show_cat_name = FALSE,
  show_serie_name = FALSE, show_percent = FALSE, separator = ", ")
```

Arguments

x	an ms_chart object.
num_fmt	character(1): number formatting specifies number format properties which indicate how to format and render the numeric values. It can be "General", "0.00", "#,##0", "#,##0.00", "mm-dd-yy", "m/d/yy h:mm", etc.
position	character(1): it specifies the position of the data label. It should be one of 'b', 'ctr', 'inBase', 'inEnd', 'l', 'outEnd', 'r', 't'. When grouping is 'clustered', it should be one of 'ctr','inBase','inEnd','outEnd'. When grouping is 'stacked', it should be one of 'ctr','inBase','inEnd'. When grouping is 'standard', it should be one of 'b','ctr','l','r','t'.
show_legend_key	show legend key if TRUE.
show_val	show values if TRUE.
show_cat_name	show categories if TRUE.
show_serie_name	show names of series if TRUE.
show_percent	show percentages if TRUE.
separator	separator for displayed labels.

---

chart_data_line_width *Modify line width*

Description

Specify mappings from levels in the data to displayed line width between symbols.

Usage

```
chart_data_line_width(x, values)
```

Arguments

x	an ms_chart object.
values	double(num of series): a set of size values to map data values to. It is a named vector, the values will be matched based on the names. If it contains only one size, this size will be associated to all existing series.

See Also

chart_data_fill, chart_data_stroke, chart_data_symbol

Examples

```
my_scatter <- ms_scatterchart(data = iris, x = "Sepal.Length",
  y = "Sepal.Width",  group = "Species")
my_scatter <- chart_settings(my_scatter, scatterstyle = "lineMarker")
my_scatter <- chart_data_fill(my_scatter,
  values = c(virginica = "#6FA2FF", versicolor = "#FF6161", setosa = "#81FF5B") )
my_scatter <- chart_data_stroke(my_scatter,
  values = c(virginica = "black", versicolor = "black", setosa = "black") )
my_scatter <- chart_data_symbol(my_scatter,
  values = c(virginica = "circle", versicolor = "diamond", setosa = "circle") )
my_scatter <- chart_data_size(my_scatter,
  values = c(virginica = 20, versicolor = 16, setosa = 20) )
my_scatter <- chart_data_line_width(my_scatter,
  values = c(virginica = 2, versicolor = 3, setosa = 6) )
```

---

chart_data_size *Modify symbol size*

Description

Specify mappings from levels in the data to displayed size of symbols.

Usage

```
chart_data_size(x, values)
```

Arguments

x	an ms_chart object.
values	double(num of series): a set of size values to map data values to. It is a named vector, the values will be matched based on the names. If it contains only one size, this size will be associated to all existing series.

See Also

chart_data_fill, chart_data_stroke, chart_data_symbol

Examples

```
my_scatter <- ms_scatterchart(data = iris, x = "Sepal.Length",
  y = "Sepal.Width",  group = "Species")
my_scatter <- chart_data_fill(my_scatter,
  values = c(virginica = "#6FA2FF", versicolor = "#FF6161", setosa = "#81FF5B") )
my_scatter <- chart_data_stroke(my_scatter,
  values = c(virginica = "black", versicolor = "black", setosa = "black") )
my_scatter <- chart_data_symbol(my_scatter,
  values = c(virginica = "circle", versicolor = "diamond", setosa = "circle") )
my_scatter <- chart_data_size(my_scatter,
  values = c(virginica = 20, versicolor = 16, setosa = 20) )
```

chart_data_smooth *Smooth series*

Description

Specify mappings from levels in the data to smooth or not lines.

Usage

```
chart_data_smooth(x, values)
```

Arguments

x	an ms_chart object.
values	integer(num of series): a set of smooth values to map data values to. It is a named vector, the values will be matched based on the names. Possible values are 0 or 1 If it contains only one integer it will be associated to all existing series.

See Also

chart_data_fill, chart_data_stroke, chart_data_size

Examples

```
linec <- ms_linechart(data = iris, x = "Sepal.Length",
  y = "Sepal.Width", group = "Species")
linec <- chart_data_smooth(linec,
  values = c(virginica = 0, versicolor = 0, setosa = 0) )
```

chart_data_stroke *Modify marker stroke colour*

Description

Specify mappings from levels in the data to displayed marker stroke colours.

Usage

```
chart_data_stroke(x, values)
```

Arguments

x	an ms_chart object.
values	character(num of series): a set of colours values to map data values to. It is a named vector, the values will be matched based on the names. If it contains only one colour, this colour will be associated to all existing series.

See Also

chart_data_fill, chart_data_symbol, chart_data_size

Examples

```
my_scatter <- ms_scatterchart(data = iris, x = "Sepal.Length",
  y = "Sepal.Width",  group = "Species")
my_scatter <- chart_data_fill(my_scatter,
  values = c(virginica = "#6FA2FF", versicolor = "#FF6161", setosa = "#81FF5B") )
my_scatter <- chart_data_stroke(my_scatter,
  values = c(virginica = "black", versicolor = "black", setosa = "black") )
```

---

chart_data_symbol *Modify symbol*

Description

Specify mappings from levels in the data to displayed symbols.

Usage

```
chart_data_symbol(x, values)
```

Arguments

x	an ms_chart object.
values	character(num of series): a set of symbol values to map data values to. It is a named vector, the values will be matched based on the names. Possible values are: 'circle', 'dash', 'diamond', 'dot', 'none', 'plus', 'square', 'star', 'triangle', 'x', 'auto'. If it contains only one symbol, this symbol will be associated to all existing series.

See Also

chart_data_fill, chart_data_stroke, chart_data_size

Examples

```
my_scatter <- ms_scatterchart(data = iris, x = "Sepal.Length",
  y = "Sepal.Width",  group = "Species")
my_scatter <- chart_data_fill(my_scatter,
  values = c(virginica = "#6FA2FF", versicolor = "#FF6161", setosa = "#81FF5B") )
my_scatter <- chart_data_stroke(my_scatter,
  values = c(virginica = "black", versicolor = "black", setosa = "black") )
my_scatter <- chart_data_symbol(my_scatter,
  values = c(virginica = "circle", versicolor = "diamond", setosa = "circle") )
```

chart_labels *Modify axis and plot labels*

Description

Add labels to a chart, labels can be specified for x axis, y axis and plot.

Usage

```
chart_labels(x, title = NULL, xlab = NULL, ylab = NULL)
```

Arguments

x	an ms_chart object.
title, xlab, ylab	Text to add

Examples

```
mylc <- ms_linechart(data = browser_ts, x = "date", y = "freq",
  group = "browser")
mylc <- chart_labels(mylc, title = "my title", xlab = "my x label",
  ylab = "my y label")
```

chart_labels_text *Modify labels font settings*

Description

Specify mappings from levels in the data to displayed text font settings.

Usage

```
chart_labels_text(x, values)
```

Arguments

x	an ms_chart object.
values	a named list of fp_text objects to map data labels to. It is a named list, the values will be matched based on the names. If it contains only one fp_text object, it will be associated to all existing series.

Examples

```
library(officer)

fp_text_settings <- list(
  serie1 = fp_text(font.size = 7, color = "red"),
  serie2 = fp_text(font.size = 0, color = "purple"),
  serie3 = fp_text(font.size = 19, color = "wheat")
)

barchart <- ms_barchart(
  data = browser_data,
  x = "browser", y = "value", group = "serie")
barchart <- chart_data_labels(barchart, show_val = TRUE)
barchart <- chart_labels_text( barchart,
  values = fp_text_settings )
```

---

chart_settings *set chart options*

Description

Set chart properties.

Usage

```
chart_settings(x, ...)

## S3 method for class 'ms_barchart'
chart_settings(x, vary_colors, gap_width, dir,
  grouping, overlap, ...)

## S3 method for class 'ms_linechart'
chart_settings(x, vary_colors, ...)

## S3 method for class 'ms_areachart'
chart_settings(x, vary_colors = FALSE,
  grouping = "standard", ...)

## S3 method for class 'ms_scatterchart'
chart_settings(x, vary_colors = FALSE,
  scatterstyle = "lineMarker", ...)
```

Arguments

x	an ms_chart object.
...	unused parameter
vary_colors	if TRUE the data points in the single series are displayed the same color.

gap_width	A gap appears between the bar or clustered bars for each category on a bar chart. The default width for this gap is 150 percent of the bar width. It can be set between 0 and 500 percent of the bar width.
dir	the direction of the bars in the chart, value must one of "horizontal" or "vertical".
grouping	grouping for a barchart, a linechart or an area chart. must be one of "percentStacked", "clustered", "standard" or "stacked".
overlap	In a bar chart having two or more series, the bars for each category are clustered together. By default, these bars are directly adjacent to each other. The bars can be made to overlap each other or have a space between them using the overlap property. Its values range between -100 and 100, representing the percentage of the bar width by which to overlap adjacent bars. A setting of -100 creates a gap of a full bar width and a setting of 100 causes all the bars in a category to be superimposed. The default value is 0.
scatterstyle	The Style for the scatter chart. One of 'none', 'line', 'lineMarker', 'marker', 'smooth', 'smoothMarker'.

Methods (by class)

- ms_barchart: barchart settings
- ms_linechart: linechart settings
- ms_areachart: linechart settings
- ms_scatterchart: linechart settings

---

ms_linechart *ms_chart object*

Description

Creation of a chart object that can be inserted in a 'Microsoft' document.

Usage

```
ms_linechart(data, x, y, group = NULL)

ms_barchart(data, x, y, group = NULL)

ms_areachart(data, x, y, group = NULL)

ms_scatterchart(data, x, y, group = NULL)
```

Arguments

data	a data.frame
x	x colname
y	y colname
group	grouping colname used to split data into series. Optional.

Functions

- ms_linechart: line plot
- ms_barchart: bar plot
- ms_areachart: area plot
- ms_scatterchart: scatter plot

Examples

```
library(officer)


#########################
# linecharts example -----
#########################

mytheme <- mschart_theme(
  axis_title_x = fp_text(color = "red", font.size = 24, bold = TRUE),
  axis_title_y = fp_text(color = "green", font.size = 12, italic = TRUE),
  grid_major_line_y = fp_border(width = 1, color = "orange"),
  axis_ticks_y = fp_border(width = 1, color = "orange") )

# example lc_01 -------
lc_01 <- ms_linechart(data = iris, x = "Sepal.Length",
                      y = "Sepal.Width", group = "Species")
lc_01 <- chart_ax_y(lc_01, num_fmt = "0.00", rotation = -90)
lc_01 <- set_theme(lc_01, mytheme)


# example lc_02 -------
lc_02 <- ms_linechart(data = browser_ts, x = "date",
                      y = "freq", group = "browser")
lc_02 <- chart_ax_y(lc_02, cross_between = "between", num_fmt = "General")
lc_02 <- chart_ax_x(lc_02, cross_between = "midCat", num_fmt = "m/d/yy")
lc_02 <- set_theme(lc_02, mytheme)


# example lc_03 -------
lc_03 <- ms_linechart(data = browser_ts, x = "date",
                      y = "freq", group = "browser")
lc_03 <- chart_ax_x(lc_03, cross_between = "midCat", num_fmt = "m/d/yy")
lc_03 <- chart_settings(lc_03, grouping = "percentStacked")



#########################
# barcharts example -----
#########################

# example my_barchart_01 -------

my_barchart_01 <- ms_barchart(data = browser_data, x = "browser",
```

```
                            y = "value", group = "serie")
my_barchart_01 <- chart_settings( x = my_barchart_01, dir="vertical",
                                  grouping="clustered", gap_width = 50 )
my_barchart_01 <- chart_ax_x( x= my_barchart_01, cross_between = 'between',
                            major_tick_mark="out")
my_barchart_01 <- chart_ax_y( x= my_barchart_01, cross_between = "midCat",
                            major_tick_mark="in")


# example my_barchart_02 -------

dat <- structure(list(Species = structure(1:3, .Label = c("setosa",
  "versicolor", "virginica"), class = "factor"), mean = c(5.006,
  5.936, 6.588)), class = "data.frame", .Names = c("Species", "mean"
  ), row.names = c(NA, -3L))

my_barchart_02 <- ms_barchart(data = dat, x = "Species", y = "mean")
my_barchart_02 <- chart_settings( x = my_barchart_02, dir="horizontal" )



# example my_barchart_03 -------

mytheme <- mschart_theme(
  axis_title_x = fp_text(color = "red", font.size = 24, bold = TRUE),
  axis_title_y = fp_text(color = "green", font.size = 12, italic = TRUE),
  grid_major_line_y = fp_border(width = 1, color = "orange"),
  axis_ticks_y = fp_border(width = 1, color = "orange") )

my_barchart_03 <- ms_barchart(data = browser_data, x = "browser",
                              y = "value", group = "serie")
my_barchart_03 <- chart_settings( my_barchart_03, dir="horizontal", grouping="stacked",
                                  gap_width = 150, overlap = 100 )
my_barchart_03 <- chart_ax_x(my_barchart_03, cross_between = 'between',
                             major_tick_mark="out", minor_tick_mark = "none")
my_barchart_03 <- chart_ax_y(my_barchart_03, num_fmt = "0.00", rotation = -90,
                             minor_tick_mark = "none")
my_barchart_03 <- set_theme(my_barchart_03, mytheme)
my_barchart_03 <- chart_data_labels(my_barchart_03, position = "inBase",
                                show_val = TRUE, separator = ", ", show_cat_name = TRUE)




##########################
# areacharts example -----
##########################

mytheme <- mschart_theme(
  axis_title_x = fp_text(color = "red", font.size = 24, bold = TRUE),
  axis_title_y = fp_text(color = "green", font.size = 12, italic = TRUE),
  grid_major_line_y = fp_border(width = 1, color = "orange"),
  axis_ticks_y = fp_border(width = 1, color = "orange") )
```

```
# example ac_01 -------
ac_01 <- ms_areachart(data = iris, x = "Sepal.Length",
                      y = "Sepal.Width", group = "Species")
ac_01 <- chart_ax_y(ac_01, num_fmt = "0.00", rotation = -90)
ac_01 <- set_theme(ac_01, mytheme)


# example ac_02 -------
ac_02 <- ms_areachart(data = browser_ts, x = "date",
                      y = "freq", group = "browser")
ac_02 <- chart_ax_y(ac_02, cross_between = "between", num_fmt = "General")
ac_02 <- chart_ax_x(ac_02, cross_between = "midCat", num_fmt = "m/d/yy")
ac_02 <- set_theme(ac_02, mytheme)


# example ac_03 -------
ac_03 <- ms_areachart(data = browser_ts, x = "date",
                      y = "freq", group = "browser")
ac_03 <- chart_ax_x(ac_03, cross_between = "midCat", num_fmt = "m/d/yy")
ac_03 <- chart_settings(ac_03, grouping = "percentStacked")



##########################
# scattercharts example -----
##########################

# example sc_01 -------
sc_01 <- ms_scatterchart(data = mtcars, x = "disp",
                         y = "drat")
sc_01 <- chart_ax_x(sc_01, cross_between = "midCat")
sc_01 <- chart_settings(sc_01, scatterstyle = "marker")
```

---

ph_with.ms_chart *add a MS Chart output into a PowerPoint object*

Description

produces a Microsoft Chart graphics output from R instructions and add the result in a PowerPoint document object produced by read_pptx.

Usage

```
## S3 method for class 'ms_chart'
ph_with(x, value, ...)
```

Arguments

x	a pptx device
value	chart object
...	Arguments to be passed to methods, argument location is mandatory.

Examples

```
my_barchart <- ms_barchart(data = browser_data,
  x = "browser", y = "value", group = "serie")
my_barchart <- chart_settings( x = my_barchart,
  dir="vertical", grouping="clustered", gap_width = 50 )
my_barchart <- chart_ax_x( x= my_barchart,
  cross_between = 'between', major_tick_mark="out")
my_barchart <- chart_ax_y( x= my_barchart,
  cross_between = "midCat", major_tick_mark="in")

library(officer)
doc <- read_pptx()
doc <- add_slide(doc, "Title and Content", "Office Theme")
doc <- ph_with(doc, my_barchart, location = ph_location_fullsize())

fileout <- tempfile(fileext = ".pptx")
print(doc, target = fileout)
```

---

ph_with_chart *add chart into a PowerPoint slide*

Description

add a chart as a new shape in the current slide. These functions will be deprecated in the next release and function ph_with.ms_chart should be used instead.#' @param x an rpptx object

Usage

```
ph_with_chart(x, chart, type = "body", index = 1)

ph_with_chart_at(x, chart, left, top, width, height)
```

Arguments

x	a pptx device
chart	ms_chart object
type	placeholder type
index	placeholder index (integer). This is to be used when a placeholder type is not unique in the current slide, e.g. two placeholders with type 'body'.
left, top	location of chart on the slide
height, width	Height and width in inches.

Examples

```
my_barchart <- ms_barchart(data = browser_data,
  x = "browser", y = "value", group = "serie")
my_barchart <- chart_settings( x = my_barchart,
  dir="vertical", grouping="clustered", gap_width = 50 )
my_barchart <- chart_ax_x( x= my_barchart,
  cross_between = 'between', major_tick_mark="out")
my_barchart <- chart_ax_y( x= my_barchart,
  cross_between = "midCat", major_tick_mark="in")


library(officer)
doc <- read_pptx()
doc <- add_slide(doc, layout = "Title and Content", master = "Office Theme")
doc <- ph_with_chart(doc, chart = my_barchart)

fileout <- tempfile(fileext = ".pptx")
print(doc, target = fileout)
```

---

print.ms_chart *ms_chart print method*

Description

an ms_chart object can not be rendered in R. The default printing method will only display simple informations about the object. If argument preview is set to TRUE, a pptx file will be produced and opened with function browseURL.

Usage

```
## S3 method for class 'ms_chart'
print(x, preview = FALSE, ...)
```

Arguments

x	an ms_chart object.
preview	preview the chart in a PowerPoint document
...	unused

`set_theme` *set chart theme*

Description

Modify chart theme with function `set_theme`.

Use `mschart_theme()` to create a chart theme.

Use `chart_theme()` to modify components of the theme of a chart.

Usage

```
set_theme(x, value)

mschart_theme(axis_title = fp_text(bold = TRUE, font.size = 16),
  axis_title_x = axis_title, axis_title_y = axis_title,
  main_title = fp_text(bold = TRUE, font.size = 20),
  legend_text = fp_text(font.size = 14), axis_text = fp_text(),
  axis_text_x = axis_text, axis_text_y = axis_text, title_rot = 0,
  title_x_rot = 0, title_y_rot = 270, axis_ticks = fp_border(color =
  "#99999999"), axis_ticks_x = axis_ticks, axis_ticks_y = axis_ticks,
  grid_major_line = fp_border(color = "#99999999", style = "dashed"),
  grid_major_line_x = grid_major_line,
  grid_major_line_y = grid_major_line,
  grid_minor_line = fp_border(width = 0),
  grid_minor_line_x = grid_minor_line,
  grid_minor_line_y = grid_minor_line, date_fmt = "yyyy/mm/dd",
  str_fmt = "General", double_fmt = "#,##0.00", integer_fmt = "0",
  legend_position = "b")

chart_theme(x, axis_title_x, axis_title_y, main_title, legend_text,
  title_rot, title_x_rot, title_y_rot, axis_text_x, axis_text_y,
  axis_ticks_x, axis_ticks_y, grid_major_line_x, grid_major_line_y,
  grid_minor_line_x, grid_minor_line_y, date_fmt, str_fmt, double_fmt,
  integer_fmt, legend_position)
```

Arguments

`x`	an `ms_chart` object.
`value`	a `mschart_theme` object.
`axis_title, axis_title_x, axis_title_y`	axis title formatting properties (fp_text)
`main_title`	title formatting properties (fp_text)
`legend_text`	legend text formatting properties (fp_text)
`axis_text, axis_text_x, axis_text_y`	axis text formatting properties (fp_text)

`title_rot, title_x_rot, title_y_rot`
: rotation angle

`axis_ticks, axis_ticks_x, axis_ticks_y`
: axis ticks formatting properties (fp_border)

`grid_major_line, grid_major_line_x, grid_major_line_y`
: major grid lines formatting properties (fp_border)

`grid_minor_line, grid_minor_line_x, grid_minor_line_y`
: minor grid lines formatting properties (fp_border)

`date_fmt`
: date format

`str_fmt`
: string or factor format

`double_fmt`
: double format

`integer_fmt`
: integer format

`legend_position`
: it specifies the position of the legend. It should be one of 'b', 'tr', 'l', 'r', 't', 'n' (for 'none').

Examples

```
library(officer)
mytheme <- mschart_theme(
  axis_title = fp_text(color = "red", font.size = 24, bold = TRUE),
  grid_major_line_y = fp_border(width = 1, color = "orange"),
  axis_ticks_y = fp_border(width = .4, color = "gray") )


my_bc <- ms_barchart(data = browser_data, x = "browser",
                             y = "value", group = "serie")
my_bc <- chart_settings( my_bc, dir="horizontal", grouping="stacked",
                                gap_width = 150, overlap = 100 )
my_bc <- set_theme(my_bc, mytheme)



my_bc_2 <- ms_barchart(data = browser_data, x = "browser",
                             y = "value", group = "serie")
my_bc_2 <- chart_theme(my_bc_2,
  grid_major_line_y = fp_border(width = .5, color = "cyan") )
```

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