

# Package ‘kpiwidget’

February 4, 2025

**Title** KPI Widgets for Quarto Dashboards with Crosstalk

**Version** 0.1.0

**Description** Provides an easy way to create interactive KPI (key performance indicator) widgets for 'Quarto' dashboards using 'Crosstalk'. The package enables visualization of key metrics in a structured format, supporting interactive filtering and linking with other 'Crosstalk'-enabled components. Designed for use in 'Quarto' Dashboards.

**License** MIT + file LICENSE

**Encoding** UTF-8

**RoxygenNote** 7.3.2

**Imports** crosstalk, htmlwidgets

**Suggests** dplyr, flexdashboard, htmltools, knitr, rmarkdown, testthat  
(>= 3.0.0)

**VignetteBuilder** knitr

**URL** <https://arnold-kakas.github.io/kpiwidget/>,  
<https://github.com/Arnold-Kakas/kpiwidget>

**Config/testthat/edition** 3

**BugReports** <https://github.com/Arnold-Kakas/kpiwidget/issues>

**NeedsCompilation** no

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**Repository** CRAN

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kpiwidget                      *Create an interactive KPI widget for Quarto dashboards with Crosstalk support.*

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## Description

This function computes and displays a key performance indicator (KPI) based on a variety of statistics. The data can be filtered using formulas. In addition, a comparison mode can be applied by specifying the comparison parameter as either "ratio" or "share". For example, if comparison = "ratio" and kpi = "sum" (with a column indicating sales), the widget will calculate the ratio of sales between two groups defined by group1 and group2.

## Usage

```
kpiwidget(
  data,
  kpi = c("count", "distinctCount", "duplicates", "sum", "mean", "min", "max"),
  comparison = NULL,
  column = NULL,
  selection = NULL,
  group1 = NULL,
  group2 = NULL,
  decimals = 1,
  big_mark = " ",
  prefix = NULL,
  suffix = NULL,
  width = NULL,
  height = NULL,
  elementId = NULL,
  group = NULL
)
```

## Arguments

data	A <code>crosstalk::SharedData</code> object.
kpi	A character string specifying the metric to compute. Options are: "sum", "mean", "min", "max", "count", "distinctCount", "duplicates". The default is count.
comparison	Optional. A character string indicating a comparison mode. Options are "ratio" or "share". If not provided (NULL), no comparison is performed.
column	A column name (as a string) to be used for numeric aggregation. In standard mode this is required. In comparison mode, if provided it is used for both groups; if omitted, counts are used.
selection	A one-sided formula to filter rows.
group1	For comparison mode: a one-sided formula defining group 1. This is required in comparison mode.

group2	For comparison mode: a one-sided formula defining group 2. For comparison = "ratio", if not provided, it defaults to the complement of group1. For comparison = "share", if not provided, it defaults to all rows.
decimals	Number of decimals to round the computed result. Default: 1.
big_mark	Character to be used as the thousands separator. Default: " ".
prefix	A string to be prepended to the displayed value.
suffix	A string to be appended to the displayed value.
width	Widget width (passed to <code>htmlwidgets::createWidget</code> ).
height	Widget height.
elementId	Optional element ID for the widget.
group	crosstalk group name. Typically provided by the SharedData object.

### Value

An object of class `htmlwidget` that will print itself into an HTML page.

### Examples

```
# Standard KPI example:
mtcars_shared <- crosstalk::SharedData$new(mtcars, key = ~ 1:nrow(mtcars), group = "mtcars_group")
kpiwidget(mtcars_shared, kpi = "mean", column = "mpg", decimals = 1,
  suffix = " mpg", height = "25px"
)

# Comparison (ratio) example: ratio of mean mpg between two groups.
kpiwidget(mtcars_shared, kpi = "mean", comparison = "ratio", column = "mpg",
  group1 = ~ cyl == 4, group2 = ~ cyl == 6, height = "25px"
)
```

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