Package ‘mmetrics’

July 26, 2019

Type Package

Title Easy Computation of Marketing Metrics with Different Analysis Axis

Version 0.3.0

Description Provides a mechanism for easy computation of marketing metrics. By default in this package, metrics for digital marketing (e.g. CTR (Click Through Rate), CVR (Conversion Rate), CPC (Cost Per Click) etc) are calculated but you can define your own metrics easily. In addition to that, you can change an analysis axis to calculate these metrics.

URL https://github.com/y-bar/mmetrics

BugReports https://github.com/y-bar/mmetrics/issues

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Encoding UTF-8

Depends R (>= 3.1.0)

Imports magrittr, dplyr, purrr, stringr, rlang, ggplot2

Suggests covr, devtools, testthat, knitr, rmarkdown

LazyData true

RoxygenNote 6.1.1

VignetteBuilder knitr


NeedsCompilation no

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Repository CRAN

Date/Publication 2019-07-26 08:50:02 UTC


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### Description

`add()` is a wrapper function of `gmutate()` and `gsummarize()`. `gmutate()` adds aggregated metrics as variables to the given data frame. `gsummarize()` aggregates metrics from the given data frame. `gsummarize()` and `gsummarise()` are synonyms.

### Usage

```r
add(df, ..., metrics = ad_metrics, summarize = TRUE)
gsummarize(df, ..., metrics)
gsummarise(df, ..., metrics)
gmutate(df, ..., metrics)
```

### Arguments

- `df` .......................... Data frame.
- `...` ........................ Variables to group by.
- `metrics` ......................... Metrics defined by `mmetrics::define()`.
- `summarize` ....................... Summarization flag. If it is `TRUE`, `add()` works as `gsummarize()`. Otherwise, `add()` works as `gmutate()`.

### Value

Data frame with calculated metrics

### Examples

```r
# Prepare data frame
df <- data.frame(
  gender = rep(c("M", "F"), 5),
  age = (1:10)*10,
  cost = (51:60),
  impression = (101:110),
)```
click = (0:9)*3
)

# Define metrics
metrics <- mmetrics::define(
cost = sum(cost),
ctr  = sum(click)/sum(impression)
)

# Evaluate
mmetrics::add(df, gender, metrics = metrics)

---

### define

**Define metrics**

**Description**

This helper is just synonym of rlang::quos intended to provide seamless experience for package user.

**Usage**

```r
define(...)```

**Arguments**

`...`

Metrics definition.

These arguments are automatically quoted and evaluated in the context of the data frame.

**See Also**

`quos`, `dplyr`'s vignettes

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### disaggregate

**Disaggregate metrics defined as aggregate function**

**Description**

Disaggregate metrics defined as aggregate function

**Usage**

```r
disaggregate(metrics)```
Arguments

metrics     metrics defined by mmetrics::define()

Value

disaggregated metrics (rlang::quosure or rlang::quosures)

Examples

metrics <- mmetrics::define(
  cost = sum(cost),
  ctr  = sum(click)/sum(impression)
)

mmetrics::disaggregate(metrics)

dummy_data            Dummy data.frame for this package

Description

A dataset contains columns often used in the digital marketing industry by user demographics

Usage

dummy_data

Format

A data frame with 10 rows and 6 variables:

gender  gender, Men (M) or Female (F)
age     age

cost    the amount how much money do you earn or advertisers spend
impression  the number of how many times some ads are shown to users

click    the number of how many times users click ads
conversion  the number of how many times users converge
**mfilter**

*Pick evaluable metrics in the given data frame*

**Description**

Pick evaluable metrics in the given data frame

**Usage**

```
mfilter(df, metrics)
```

**Arguments**

- `df` Data frame
- `metrics` Metrics

**Value**

Evaluable metrics

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**mplot_bar**

*Plot bar charts*

**Description**

Plot bar charts.

**Usage**

```
mplot_bar(df, y, x = NULL)
```

**Arguments**

- `df` data.frame
- `y` y axis
- `x` x axis

**Value**

`ggplot` object
Examples

```r
## Not run:
df <- mmetrics::dummy_data
# Add metrics and plot directly
mmetrics::mplot_bar(mmetrics::add(df, gender), ctr, gender)
# You can remove x parameter. in this case first column is assumed as x parameter
mmetrics::mplot_bar(mmetrics::add(df, gender), ctr)

## End(Not run)
```