

# Package ‘mmetrics’

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**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>

**License** MIT + file LICENSE

**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

**Collate** 'data.R' 'disaggregate.R' 'mmetrics.R' 'metrics\_definition.R' 'mplot.R'

**NeedsCompilation** no

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**Repository** CRAN

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add	<i>Aggregate metrics</i>
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### Description

`add()` is 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

```
add(df, ..., metrics = ad_metrics, summarize = TRUE)

gsummarize(df, ..., metrics)

gsummarise(df, ..., metrics)

gmutate(df, ..., metrics)
```

### Arguments

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

### Value

Data frame with calculated metrics

### Examples

```
# 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)
```

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define	<i>Define metrics</i>
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### Description

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

### Usage

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

### Arguments

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

### See Also

`quos`, `dplyr`'s vignettes<sup>1</sup>

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disaggregate	<i>Disaggregate metrics defined as aggregate function</i>
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### Description

Disaggregate metrics defined as aggregate function

### Usage

```
disaggregate(metrics)
```

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<sup>1</sup><https://cran.r-project.org/package=dplyr/vignettes/programming.html>

## 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)
```

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dummy\_data

*Dummy data.frame for this package*

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## 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

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`mfilter`*Pick evaluable metrics in the given data frame*

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**Description**

Pick evaluable metrics in the given data frame

**Usage**

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

**Arguments**

<code>df</code>	Data frame
<code>metrics</code>	Metrics

**Value**

Evaluable metrics

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`mplot_bar`*Plot bar charts*

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**Description**

Plot bar charts.

**Usage**

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

**Arguments**

<code>df</code>	data.frame
<code>y</code>	y axis
<code>x</code>	x axis

**Value**

ggplot object

**Examples**

```
## 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)
```