# Package 'completejourney'

November 26, 2025
Title Retail Shopping Data
Version 1.1.1
<b>Description</b> Retail shopping transactions for 2,469 households over one year.  Originates from the 84.51° Complete Journey 2.0 source files <a href="https://www.8451.com/area51">https://www.8451.com/area51</a> > which also includes useful metadata on products, coupons, campaigns, and promotions.
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LazyData true
<b>Depends</b> R (>= $2.10$ )
Imports curl, dplyr, tibble, progress, stringr, zeallot
Suggests lubridate, knitr, rmarkdown, testthat
<pre>URL https://github.com/bradleyboehmke/completejourney</pre>
BugReports https://github.com/bradleyboehmke/completejourney/issues
RoxygenNote 7.3.3
Encoding UTF-8
VignetteBuilder knitr
NeedsCompilation no
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Repository CRAN
<b>Date/Publication</b> 2025-11-26 06:10:02 UTC
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campaigns

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Campaigns to household data.

#### **Description**

Data on the campaigns received by each household in the Complete Journey study. Each household received a different set of marketing campaigns.

# Usage

campaigns

# **Format**

A data frame with 6,589 rows and 2 variables

- campaign\_id: Uniquely identifies each campaign; Ranges 1-27
- household\_id: Uniquely identifies each household

#### Value

```
campaigns a tibble
```

#### **Source**

```
84.51°, Customer Journey study, https://www.8451.com/area51/
```

```
# full data set
campaigns

# Join household demographics metadata to campaigns dataset
require("dplyr")
campaigns %>%
  left_join(demographics, "household_id")
```

campaign\_descriptions

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campaign\_descriptions Campaign metadata.

#### **Description**

Campaign metadata for all campaigns run for the Customer Journey study. This dataset gives the length of time for which a campaign runs. So, any coupons received as part of a campaign are valid within the dates contained in this dataset.

#### Usage

```
campaign_descriptions
```

#### **Format**

A data frame with 27 rows and 4 variables

- campaign\_id: Uniquely identifies each campaign; Ranges 1-27
- campaign\_type: Type of campaign (Type A, Type B, Type C)
- start\_date: Start date of campaign
- end\_date: End date of campaign

#### Value

#### **Source**

```
84.51°, Customer Journey study, http://www.8451.com/area51/
```

```
# full data set
campaign_descriptions

# Join product campaign metadata to campaign_table dataset
require("dplyr")
campaigns %>%
  left_join(campaign_descriptions, "campaign_id")
```

4 coupons

completejourney

completejourney package

#### Description

Retail shopping transactions for 2,469 households over one year

#### **Details**

Learn more here: GitHub

#### Author(s)

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#### See Also

Useful links:

- https://github.com/bradleyboehmke/completejourney
- Report bugs at https://github.com/bradleyboehmke/completejourney/issues

coupons

Coupon metadata.

# Description

Coupon metadata for all coupons used in campaigns advertised to households participating in the Customer Journey study.

#### Usage

coupons

#### Format

A data frame with 116,204 rows and 3 variables

- coupon\_upc: Uniquely identifies each coupon (unique to household and campaign)
- product\_id: Uniquely identifies each product
- campaign\_id: Uniquely identifies each campaign

coupon\_redemptions 5

#### Value

```
coupons a tibble
```

#### **Source**

```
84.51°, Customer Journey study, http://www.8451.com/area51/
```

#### **Examples**

```
# full data set
coupons

# Join product metadata to coupon dataset
require("dplyr")
coupons %>%
  left_join(products, "product_id")
```

coupon\_redemptions

Coupon redemption data.

#### **Description**

Coupon data identifying the coupons that each household redeemed in the Complete Journey study.

# Usage

```
coupon_redemptions
```

#### **Format**

A data frame with 2,102 rows and 4 variables

- household\_id: Uniquely identifies each household
- coupon\_upc: Uniquely identifies each coupon (unique to household and campaign)
- campaign\_id: Uniquely identifies each campaign
- redemption\_date: Date when the coupon was redeemed

#### **Source**

```
84.51°, Customer Journey study, http://www.8451.com/area51/
```

6 demographics

#### **Examples**

```
# full data set
coupon_redemptions

# Join coupon metadata to coupon_redempt dataset
require("dplyr")
coupon_redemptions %>%
  left_join(coupons, "coupon_upc")
```

demographics

Household demographic metadata.

# Description

Household demographic metadata for households participating in the Customer Journey study. Due to nature of the data, the demographic information is not available for all households.

#### Usage

demographics

#### **Format**

A data frame with 801 rows and 8 variables

- household\_id: Uniquely identifies each household
- age: Estimated age range
- income: Household income range
- home\_ownership: Homeowner status (Homeowner, Renter, Unknown)
- marital\_status: Marital status (Married, Single, Unknown)
- household\_size: Size of household up to 5+
- household\_comp: Household composition description
- kids\_count: Number of children present up to 3+

#### Value

```
demographics a tibble
```

#### **Source**

```
84.51°, Customer Journey study, https://www.8451.com/area51/
```

get\_data 7

#### **Examples**

```
# full data set
demographics

# Transaction line items that don't have household metadata
require("dplyr")
transactions_sample %>%
    anti_join(demographics, "household_id")
```

get\_data

Download full promotions and transactions data simultaneously.

#### Description

The promotions and transactions data sets are too large to be contained within the package. get\_data() is a convenience function to download both full promotions and transactions data sets simultaneously from the source GitHub repository. An internet connection is required.

#### Usage

```
get_data(which = "both", verbose = TRUE)
```

# **Arguments**

which

Character string of one or more data sets to be downloaded. Can be one of the following; default is "both":

- "both"
- "promotions"
- · "transactions"

verbose

Logical indicator whether or not to download silently.

#### Value

Downloading a single data set will result in a tibble whereas downloading multiple data sets will return a list containing each tibble. Returns NULL if the download fails (e.g., network timeout, GitHub unavailability) with an informative message about the failure. For specific details on a given data set see the data sets respective help file (i.e. ?transactions\_sample).

#### Source

Downloading from https://github.com/bradleyboehmke/completejourney/tree/master/data. Data originated from 84.51°, Customer Journey study, http://www.8451.com/area51/ and were processes for analysis.

8 get\_promotions

#### See Also

Use %<-% for unpacking a list with multiple tibbles to their own global environment tibble. You can also download a single data set with get\_promotions and get\_transactions.

#### **Examples**

```
# download transactions and promotions data sets
# requires internet connection
c(promotions, transactions) %<-% get_data(which = "both")</pre>
```

get\_promotions

Get full Complete Journey promotions data set.

#### **Description**

The complete promotions data set for the Complete Journey is too large to be contained within the package. get\_promotions() provides an efficient method for downloading the full data set from the source GitHub repository.

#### Usage

```
get_promotions(verbose = FALSE)
```

#### **Arguments**

verbose

Logical indicator whether or not to download silently.

#### Value

A data frame with 20,940,529 rows and 5 variables. Returns NULL if the download fails (e.g., network timeout, GitHub unavailability) with an informative message about the failure.

#### Source

Downloading from https://github.com/bradleyboehmke/completejourney/tree/master/data. Data originated from 84.51°, Customer Journey study, http://www.8451.com/area51/ and were processes for analysis.

#### See Also

promotions\_sample for details regarding the variables.

```
# requires internet connection
promotions <- get_promotions()</pre>
```

get\_transactions 9

get\_transactions

Get full Complete Journey transactions data set.

#### **Description**

The complete transactions data set for the Complete Journey is too large to be contained within the package. get\_transactions() provides an efficient method for downloading the full data set from the source GitHub repository.

#### Usage

```
get_transactions(verbose = FALSE)
```

#### **Arguments**

verbose

Logical indicator whether or not to download silently.

#### Value

A data frame with 1,469,307 rows and 11 variables. Returns NULL if the download fails (e.g., network timeout, GitHub unavailability) with an informative message about the failure.

#### Source

Downloading from https://github.com/bradleyboehmke/completejourney/tree/master/data. Data originated from 84.51°, Customer Journey study, http://www.8451.com/area51/ and were processes for analysis.

#### See Also

transactions\_sample for details regarding the variables.

```
# requires internet connection
transactions <- get_transactions()</pre>
```

10 products

products

Product metadata.

# Description

Product metadata for all products purchased by households participating in the Customer Journey study.

#### Usage

products

#### **Format**

A data frame with 92,331 rows and 7 variables

- product\_id: Uniquely identifies each product
- manufacturer\_id: Uniquely identifies each manufacturer
- department: Groups similar products together
- brand: Indicates Private or National label brand
- product\_category: Groups similar products together at lower level
- product\_type: Groups similar products together at lowest level
- package\_size: Indicates package size (not available for all products)

#### Value

```
products a tibble
```

#### **Source**

```
84.51°, Customer Journey study, https://www.8451.com/area51/
```

```
# full data set
products

# Transaction line items that don't have product metadata
require("dplyr")
transactions_sample %>%
   anti_join(products, "product_id")
```

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promotions\_sample

Sampling of the full promotions data set.

#### **Description**

A sampling of the promotions data from the Complete Journey study signifying whether a given product was featured in the weekly mailer or was part of an in-store display (other than regular product placement).

# Usage

```
promotions_sample
```

#### **Format**

A data frame with 360,535 rows and 5 variables

- product\_id: Uniquely identifies each product
- store\_id: Uniquely identifies each store
- display\_location: Display location (see details for range of values)
- mailer\_location: Mailer location (see details for range of values)
- week: Week of the transaction; Ranges 1-53

#### Value

#### **Display Location Codes**

- 0 Not on Display
- 1 Store Front
- 2 Store Rear
- 3 Front End Cap
- 4 Mid-Aisle End Cap
- 5 Rear End Cap
- 6 Side-Aisle End Cap
- 7 In-Aisle
- 9 Secondary Location Display
- · A In-Shelf

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#### **Mailer Location Codes**

- 0 Not on ad
- A Interior page feature
- C Interior page line item
- D Front page feature
- F Back page feature
- H Wrap from feature
- J Wrap interior coupon
- L Wrap back feature
- P Interior page coupon
- X Free on interior page
- Z Free on front page, back page or wrap

#### **Source**

```
84.51°, Customer Journey study, http://www.8451.com/area51/
```

#### See Also

Use get\_promotions to download the entire promotions data containing all 20,940,529 rows.

#### **Examples**

```
# sampled promotions data set
promotions_sample

# Join promotions to transactions to analyze
# product promotion/location
require("dplyr")
transactions_sample %>%
  left_join(
    promotions_sample,
    c("product_id", "store_id", "week")
)
```

transactions\_sample

Sampling of the full Complete Journey transactions.

#### **Description**

A sampling of all products purchased by households within the Complete Journey study. Each line found in this table is essentially the same line that would be found on a store receipt. This is only a subsample of the complete data set to keep package size manageable.

transactions\_sample 13

#### Usage

```
transactions_sample
```

#### **Format**

```
A data frame with 75,000 rows and 11 variables
```

household\_id Uniquely identifies each household

store\_id Uniquely identifies each store

basket\_id Uniquely identifies a purchase occasion

product\_id Uniquely identifies each product

quantity Number of the products purchased during the trip

sales\_value Amount of dollars retailer receives from sale

retail\_disc Discount applied due to retailer's loyalty card program

coupon\_disc Discount applied due to manufacturer coupon

coupon\_match\_disc Discount applied due to retailer's match of manufacturer coupon

week Week of the transaction; Ranges 1-53

transaction\_timestamp Date and time of when the transaction occurred

#### Value

```
transactions_sample a tibble
```

#### **Source**

```
84.51°, Customer Journey study, http://www.8451.com/area51/
```

#### See Also

Use get\_transactions to download the entire transactions data containing all 1,469,307 rows.

```
transactions_sample
```

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%<-%

Assign values to names

# Description

See %<-% for more details.

# Usage

x %<-% value

# Arguments

x A name structure.

value A list of values, vector of values, or R objects to assign.

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