

Package ‘completejourney’

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Title Retail Shopping Data

Version 1.1.1

Description Retail shopping transactions for 2,469 households over one year.
Originates from the 84.51° Complete Journey 2.0 source files
<<https://www.8451.com/area51>> which also includes useful metadata on
products, coupons, campaigns, and promotions.

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LazyData true

Depends R (>= 2.10)

Imports curl, dplyr, tibble, progress, stringr, zeallot

Suggests lubridate, knitr, rmarkdown, testthat

URL <https://github.com/bradleyboehmke/completejourney>

BugReports <https://github.com/bradleyboehmke/completejourney/issues>

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campaigns	<i>Campaigns to household data.</i>
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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/>

Examples

```
# full data set
campaigns

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

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

```
campaign_descriptions  
  a tibble
```

Source

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

Examples

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

completejourney	completejourney <i>package</i>
-----------------	--------------------------------

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	<i>Coupon metadata.</i>
---------	-------------------------

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

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/>

Examples

```
# full data set
coupon_redemptions

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

demographics	<i>Household demographic metadata.</i>
--------------	--

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/>

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	<i>Download full promotions and transactions data simultaneously.</i>
----------	---

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": <ul style="list-style-type: none">• "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 processed for analysis.

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")
```

get_promotions	<i>Get full Complete Journey promotions data set.</i>
----------------	---

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 processed for analysis.

See Also

`promotions_sample` for details regarding the variables.

Examples

```
# requires internet connection
promotions <- get_promotions()
```

get_transactions	<i>Get full Complete Journey transactions data set.</i>
------------------	---

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 processed for analysis.

See Also

[transactions_sample](#) for details regarding the variables.

Examples

```
# requires internet connection
transactions <- get_transactions()
```

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/>

Examples

```
# full data set
products

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

promotions_sample	<i>Sampling of the full promotions data set.</i>
-------------------	--

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

```
promotions_sample
  a tibble
```

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

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.

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.

Examples

transactions_sample

%<-%

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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