Package: SMCRM (via r-universe)

August 26, 2024

Type Package

Title Data Sets for Statistical Methods in Customer Relationship Management by Kumar and Petersen (2012).

Version 0.0-3

Date 2013-09-16

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Description Data Sets for Kumar and Petersen (2012). Statistical Methods in Customer Relationship Management, Wiley: New York.

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Collate 'customerAcquisition.R' 'acquisitionRetention.R' 'customerChurn.R' 'customerWinBack.R' 'customerRetentionDemographics.R' 'customerRetentionLifetimeDuration.R' 'customerRetentionTransactions.R'

NeedsCompilation no

Date/Publication 2013-09-16 09:17:35

Repository https://tverbeke.r-universe.dev

RemoteUrl https://github.com/cran/SMCRM

RemoteRef HEAD

RemoteSha 862935424ff2faadb0f44a136c8c5dbecf3bac52

Contents

`acquisitionRetention` *Acquisition-Retention Data from Chapter 5*

Description

Acquisition-Retention Data from Chapter 5

Usage

```
acquisitionRetention
```

Format

Data frame with the following 15 variables

`customer` customer number (from 1 to 500)

`acquisition` 1 if the prospect was acquired, 0 otherwise

`duration` number of days the customer was a customer of the firm, 0 if acquisition == 0

`profit` customer lifetime value (CLV) of a given customer, -(Acq_Exp) if the customer is not acquired

`acq_exp` total dollars spent on trying to acquire this prospect

`ret_exp` total dollars spent on trying to retain this customer

`acq_exp_sq` square of the total dollars spent on trying to acquire this prospect

`ret_exp_sq` square of the total dollars spent on trying to retain this customer

`freq` number of purchases the customer made during that customer's lifetime with the firm, 0 if acquisition == 0

`freq_sq` square of the number of purchases the customer made during that customer's lifetime with the firm

`crossbuy` number of product categories the customer purchased from during that customer's lifetime with the firm, 0 if acquisition = 0

`sow` Share-of-Wallet; percentage of purchases the customer makes from the given firm given the total amount of purchases across all firms in that category

`industry` 1 if the customer is in the B2B industry, 0 otherwise

`revenue` annual sales revenue of the prospect's firm (in millions of dollar)

`employees` number of employees in the prospect's firm

Examples

```
data(acquisitionRetention)
  str(acquisitionRetention)
```

customerAcquisition *Customer Acquisition Data from Chapter 3*

Description

Customer Acquisition Data from Chapter 3

Usage

```
customerAcquisition
```

Format

Data frame with the following 17 variables

`customer` customer number (from 1 to 500)

`acquisition` 1 if the prospect was acquired, 0 otherwise

`first_purchase` dollar value of the first purchase (0 if the customer was not acquired)

`clv` the predicted customer lifetime value score. It is 0 if the prospect was not acquired or has already churned from the firm.

`duration` time in days that the acquired prospect has been or was a customer, right-censored at 730 days

`censor` 1 if the customer was still a customer at the end of the observation window, 0 otherwise

`acq_expense` dollars spent on marketing efforts to try and acquire that prospect

`acq_expense_sq` square of dollars spent on marketing efforts to try and acquire that prospect

`industry` 1 if the customer is in the B2B industry, 0 otherwise

`revenue` annual sales revenue of the prospect's firm (in millions of dollar)

`employees` number of employees in the prospect's firm

`ret_expense` dollars spent on marketing efforts to try and retain that customer

`ret_expense_sq` square of dollars spent on marketing efforts to try and retain that customer

`crossbuy` the number of categories the customer has purchased

`frequency` the number of times the customer purchased during the observation window

`frequency_sq` the square of the number of times the customer purchased during the observation window

Examples

```
data(customerAcquisition)
  str(customerAcquisition)
```

customerChurn *Customer Churn Data from Chapter 6*

Description

Customer Churn Data from Chapter 6

Usage

```
customerChurn
```

Format

Data frame with the following 11 variables

`customer` customer number (from 1 to 500)

`duration` time in days that the acquired prospect has been or was a customer, right-censored at 730 days

`censor` 1 if the customer was still a customer at the end of the observation window, 0 otherwise

`avg_ret_exp` average number of dollars spent on marketing efforts to try and retain that customer per month

`avg_ret_exp_sq` square of the average number of dollars spent on marketing efforts to try and retain that customer per month

`total_crossbuy` total number of categories the customer has purchased during the customer's lifetime

`total_freq` total number of purchase occasions the customer had with the firm in the customer's lifetime

`total_freq_sq` square of the total number of purchase occasions the customer had with the firm in the customer's lifetime

`industry` 1 if the customer is in the B2B industry, 0 otherwise

`revenue` annual sales revenue of the prospect's firm (in millions of dollar)

`employees` number of employees in the prospect's firm

Examples

```
data(customerChurn)
  str(customerChurn)
```

customerRetentionDemographics
Demographics Data for Customer Retention (Chapter 4)

Description

Demographics Data for Customer Retention (Chapter 4)

Usage

```
customerRetentionDemographics
```

Format

Data frame with the following 8 variables

`customer` customer number (from 1 to 500)

`gender` 1 if the customer is male, 0 if the customer is female

`married` 1 if the customer is married, 0 if the customer is not married

`income` 1 if income < \$30,000 2 if \$30,001 < income < \$45,000 3 if \$45,001 < income < \$60,000 4 if \$60,001 < income < \$75,000 5 if \$75,001 < income < \$90,000 6 if income > \$90,001

`first_purchase` value of the first purchase made by the customer in quarter 1

`loyalty` 1 if the customer is a member of the loyalty program, 0 if not

`sow` share-of-wallet; the percentage of purchases the customer makes from the given firm given the total amount of purchases across all firms in that category

`clv` discounted value of all expected future profits, or customer lifetime value

Examples

```
data(customerRetentionDemographics)
  str(customerRetentionDemographics)
```

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customerRetentionLifetimeDuration
Lifetime Duration Data for Customer Retention (Chapter 4)

Description

Lifetime Duration Data for Customer Retention (Chapter 4)

Usage

```
customerRetentionLifetimeDuration
```

Format

Data frame with the following 8 variables

`customer` customer number (from 1 to 500)

`x` The number of transactions by a given customer over all time periods. Here we assume that it is the sum of the variable Purchase where customers at most made 1 purchase per quarter.

`tx` time of the last transaction, i.e. the last quarter where purchase == 1

`T` total time between the first purchase and the end of the observation window, i.e. 12 quarters for all customers

See Also

customerRetentionTransactions

Examples

```
data(customerRetentionLifetimeDuration)
  str(customerRetentionLifetimeDuration)
```

`customerRetentionTransactions`
Transactions Data for Customer Retention (Chapter 4)

Description

Transactions Data for Customer Retention (Chapter 4)

Usage

```
customerRetentionTransactions
```

Format

Data frame with the following 7 variables

`customer` customer number (from 1 to 500)

`quarter` quarter (from 1 to 12) where the transactions occurred

`purchase` 1 when the customer purchased in the given quarter and 0 if no purchase occurred in that quarter

`order_quantity` dollar value of the purchases in the given quarter

`crossby` number of different categories purchased in a given quarter

`ret_expense` dollars spent on marketing efforts to try and retain that customer in the given quarter

`ret_expense_sq` square of dollars spent on marketing efforts to try and retain that customer in the given quarter

Examples

```
data(customerRetentionTransactions)
str(customerRetentionTransactions)
```

`customerWinBack` *Customer Win-Back from Chapter 7*

Description

Customer Win-Back from Chapter 7

Usage

```
customerWinBack
```

Format

Data frame with the following 10 variables

`customer` customer number (from 1 to 500)

`reacquire` 1 if the customer is reacquired, 0 if not

`duration_2` time in days of the customer's second lifecycle with the company, 0 if not reacquired

`slcv` CLV of the customer in the second lifecycle

`duration_1` time in days of the customer's first lifecycle with the company

`offer` value of the offer provided to the customer for reacquisition

`duration_lapse` time in days since the customer was lost to when the offer to reacquire was given

`price_change` increase (or decrease) in price of the subscription the customer received between the first lifecycle and the second lifecycle, 0 if not reacquired

`gender` 1 if male, 0 if female

`age` age in years of the customer at the time of the attempt to reacquire

Examples

```
data(customerWinBack)
str(customerWinBack)
```

Index