

Target variables

Name	Label	Description
Churn	Churn	Indicates whether customers churned.
Upsell_xsell	Xsell Upsell Flag	Indicates customer's flag for cross-sell or up-sell. (You do not use this variable in this course.)

Categorical-valued inputs

Name	Label	Description
credit_class	Credit Class	Credit category for an account or customer. It summarizes the overall credit worthiness of a customer or account.
sales_channel	Acquisition Channel	The way in which the consumer was persuaded to purchase company's services.
region	Account Region	Customer account region.
state	Account State	Customer state location.
city	Account City	City designation for customer address.
zipcode_primary	Account Code	Primary customer ZIP code.
product_plan_desc	Plan Name	Customer's product plan.
handset_age_grp	Handset Age Group	Customer's handset age in days.
handset	Handset Mfg	Handset manufacturer. Values include <i>Apple</i> , <i>HTC</i> , <i>LG</i> , <i>Motorola</i> , <i>Nokia</i> , <i>Samsung</i> , and <i>Unknown</i> .
lifestage	Plan Life Stage	Type of contract.
rp_pooled_ind	Pooled Rate Plan	Indicates whether customer has pooled rate.
call_center	Last Call Center Used	Location of the last call center used.
issue_level1	Call Center Issue Level 1	Level 1 reason of the call.
issue_level2	Call Center Issue Level 2	Level 2 reason of the call.
call_category_1	Call Center Category 1	Category 1 for the call.
call_category_2	Call Center Category 2	Category 2 for the call.
resolution	Final Resolution	Resolution action taken by call center.
verbatim	Survey Verbatim	Feedback from customers via call centers.

Interval-valued inputs

Name	Label	Description
lifetime_value	Lifetime Value	Customer's value.
avg_arpu_3m	3M Avg Revenue per User	Average revenue for the past three months.
acct_age	Account Tenure	Number of months that the account has been active.
billing_cycle	Billing Cycle	Customer's billing cycle (period of the month).
nbr_contract_ltd	Total Number Contract lifetime	Number of contracts during life cycle.
rfm_score	Account Ranking (RFM Score)	Customer's account score.
Est_HH_Income	Estimated HH Income	Household income.
region_lat	Account Region Latitude	Customer region latitude.
region_long	Account Region Longitude	Customer region longitude.
state_lat	Account State Latitude	State latitude.
state_long	Account State Longitude	State longitude.
city_lat	Account City Latitude	Customer city latitude.
city_long	Account City Longitude	Customer city longitude.
zip_lat	Account ZIP Code Latitude	ZIP code latitude.
zip_long	Account ZIP Code Longitude	ZIP code longitude.
cs_med_home_value	Census Area Median Home Value Index	Median home value in customer's area.
cs_pct_home_owner	Census Area Percent Home Owner	Percentage home owner in customer's area.
cs_ttl_pop	Census Area Total Population	Population in customer's area.
cs_hispanic	Census Area Hispanic	Hispanic population in customer's area.
cs_caucasian	Census Area Caucasian	Caucasian population in customer's area.
cs_afr_amer	Census Area African-American	African-American population in customer's area.
cs_other	Census Area Other	Other population in customer's area.
cs_ttl_urban	Census Area Total Urban	Urban population in customer's area.

Name	Label	Description
cs_ttl_rural	Census Area Total Rural	Rural population in customer's area.
cs_ttl_male	Census Area Total Males	Male population in customer's area.
cs_ttl_female	Census Area Total Females	Female population in customer's area.
cs_ttl_hhlds	Census Area Total Households	Households in customer's area.
cs_ttl_mdage	Census Area Median Age	Median age in customer's area.
mb_inclplan	Plan Data MB	MB included in the plan.
ever_days_over_plan	Total Days Over Plan	Total days over the plan.
ever_times_over_plan	Total Times Over Plan	Total times over the plan.
data_device_age	Avg Age of Devices on Plan	Average age of devices on the plan.
equip_age	Handset Age	Age of equipment history, whether mobile device, smartphone, or another handset type.
mfg_apple	Own Apple	Apple manufactured device. 1 is Yes, 0 means No.
mfg_samsung	Own Samsung	Samsung manufactured device. 1 is Yes, 0 means No.
mfg_htc	Own HTC	HTC manufactured device. 1 is Yes, 0 means No.
mfg_motorola	Own Motorola	Motorola manufactured device. 1 is Yes, 0 means No.
mfg_lg	Own LG	LG manufactured device. 1 is Yes, 0 means No.
mfg_nokia	Own Nokia	Nokia manufactured device. 1 is Yes, 0 means No.
delinq_indicator	Delinquent Indicator	Delinquency indicator. Scale varies from -2 to +4, depending on customer history.
times_delinq	Consecutive Mths Delinquent	Consecutive months in default.
count_of_suspensions_6m	Times Suspended Last 6M	Times suspended in the past six months.
avg_days_susp	Days Suspended Last 6M	Days suspended in the past six months.
calls_total	Total Calls Curr	Current number of calls.

Name	Label	Description
calls_in_pk	Calls Incoming Peak	Number of calls received in peak time.
calls_in_offpk	Calls Incoming Off-Peak	Number of call received off peak time.
calls_out_offpk	Calls Outgoing Off-Peak	Number of calls made in peak time.
calls_out_pk	Calls Outgoing Peak	Number of calls made off peak time.
mou_total_pct_MOM	Minutes Total Pct Change Month over Month	Percentage of minutes change month over month.
mou_onnet_pct_MOM	Minutes on Network Pct Change Month over Month	Percentage of minutes on network change month over month.
mou_roam_pct_MOM	Minutes Roaming Pct Change Month over Month	Percentage of minutes on roaming change month over month.
mou_onnet_6m_normal	6M Avg Minutes on Network Normally Distributed	Minutes of use on network over six months normally distributed.
mou_roam_6m_normal	6M Avg Minutes Roaming Normally Distributed	Minutes of use in roaming over six months normally distributed.
voice_total_bill_mou_curr	Total Voice Billed Minutes of Use	Current minutes of voice billed.
tot_voice_chrgs_curr	Total Voice Charges	Current minutes of voice charged.
tot_drpd_pr1	Number of Dropped Calls 1 Mth Prior	Number of dropped calls on the previous month.
bill_data_usg_m03	3M Avg Billed Data Usage	Average data billed over the past three months.
bill_data_usg_m06	6M Avg Billed Data Usage	Average data billed over the past six months.
bill_data_usg_m09	9M Avg Billed Data Usage	Average data billed over the past nine months.
mb_data_usg_m01	MB Data Usage 1 Mth Prior	MB data used on the previous month.
mb_data_usg_m02	MB Data Usage 2 Mths Prior	MB data used prior two months.
mb_data_usg_m03	MB Data Usage 3 Mths Prior	MB data used prior three months.
mb_data_ndist_mo6m	6M Avg Billed Data Usage Normally Distributed	Data used on network over six months normally distributed.

Name	Label	Description
mb_data_usg_roamm01	MB Data Usage Roam 1 Mth Prior	Data used in roaming in the previous month.
mb_data_usg_ roamm02	MB Data Usage Roam 2 Mths Prior	Data used in roaming prior two months.
mb_data_usg_ roamm03	MB Data Usage Roam 3 Mths Prior	Data used in roaming prior three months.
data_usage_amt	Data Usage Amount	Total data usage amount over last month.
tweedie_adjusted	Data Usage Amt Tweedie Distributed	Data used in Twitter.
tot_mb_data_curr	Total MB of Data Usage	Current MB data used.
tot_mb_data_roam_curr	Total MB of Roam Data Usage	Current MB data used in roaming.
bill_data_usg_total	Total Billed Data usage	Total billed data.
tot_overage_chgs	Total Overage Charges	Total overage charged.
data_prem_chrgs_curr	Premium Data Charges	Premium data charged.
nbr_data_cdrs	Number of Data Records	Number of call detail records.
avg_data_chrgs_3m	3M Avg Data Charges	Average data charged in the past three months.
avg_data_prem_chrgs_3m	3M Avg Premium Data Charges	Average premium data charged in the past three months.
avg_overage_chrgs_3m	3M Avg Overage Charges	Average overage data charged in the past three months.
nbr_contacts	Number Times Customer Contacted	Number of contacts customer made to the company.
calls_TS_acct	Number Calls Tech Support	Number of tech support calls.
open_tsupcomplnts	Open Tech Support Complaints	Number of tech support complains opened.
num_tsupcomplnts	Tech Support Complaints - LTD	Number of tech support complains.
unsolv_tsupcomplnts	Unresolved Tech Support Complaints - LTD	Number of unsolved tech support complaints.
wrk_orders	Open Work Orders	Number of open work.
days_openwrkorders	Days of Open Work Orders	Days of open work.
resolved_complnts	Resolved Complaints	Number of complaints resolved.

Name	Label	Description
calls_care_acct	Number Calls Care Center	Call center care account assignment, which takes values between 0-9.
calls_care_3mavg_acct	Number Calls Care Center 3 Month Avg	Call center care account score over past three months averaged.
calls_care_6mavg_acct	Number Calls Care Center 6 Month Avg	Call center care account score over past six months averaged.
res_calls_3mavg_acct	Resolved Calls – 3Mo Average	Average number of resolved customer service calls over past three months for the customer account.
res_calls_6mavg_acct	Resolved Calls – 6Mo Average	Average number of resolved customer service calls over past six months for the customer account.
last_rep_sat_score	Last Call Satisfaction Rating Given	Latest customer service representative satisfaction score (given by past customers).
network_mention	Network Issues Discussed	Number of network issues discussed.
service_mention	Service Issues Discussed	Number of service issues discussed.
price_mention	Price Issues Discussed	Number of prices issues discussed.
times_susp	Number of Times Suspended	Number of times suspended.
curr_days_susp	Number of Days Suspended	Number of days suspended.
pymts_late_ltd	Total Late Payments Lifetime	Number of late payments.
calls_care_ltd	Total Calls to Care Lifetime	Number of calls to call center.
MB_Data_Usg_M04	MB of Data Usage Month 4	MB data used in past four months.
MB_Data_Usg_M05	MB of Data Usage Month 5	MB data used in past five months.
MB_Data_Usg_M06	MB of Data Usage Month 6	MB data used in past six months.
MB_Data_Usg_M07	MB of Data Usage Month 7	MB data used in past seven months.
MB_Data_Usg_M08	MB of Data Usage Month 8	MB data used in past eight months.

Name	Label	Description
MB_Data_Usg_M09	MB of Data Usage Month 9	MB data used in past nine months.
seconds_of_data_norm	Seconds of Data - Normalized	Number of seconds of data normalized.
seconds_of_data_log	Seconds of Data - Natural Log	Number of seconds of data transformed by log.