

Analysis Report

Global dataset report

This report is the output of the Amazon SageMaker Clarify analysis. The report is split into following parts:

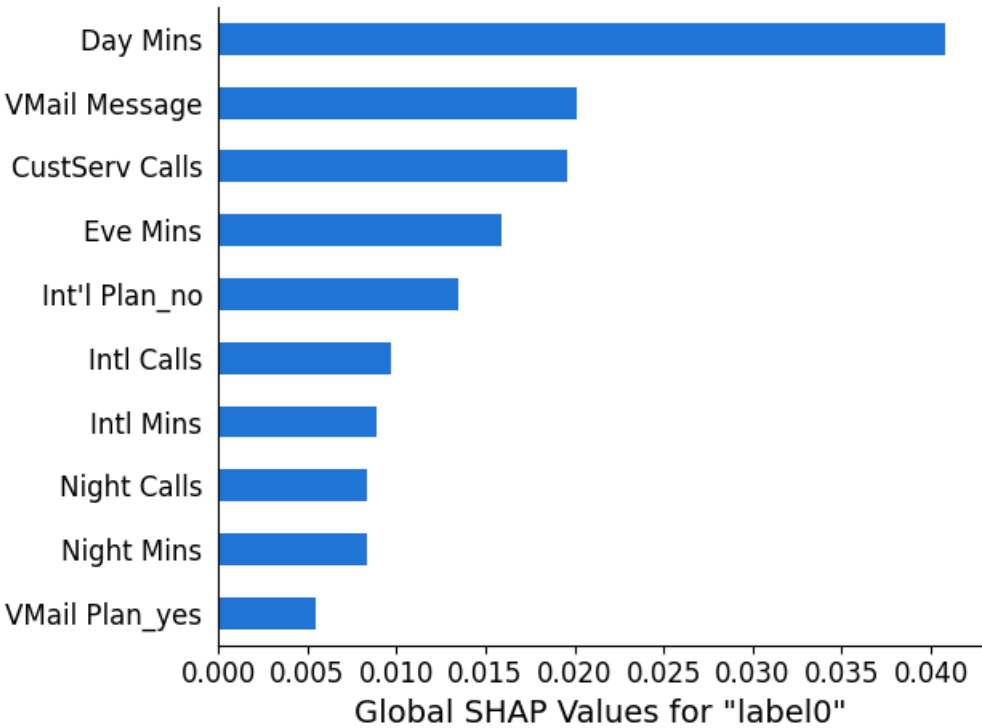
- 1. Model explanations

Model explanations

SHAP Explanations for individual labels

The model has 69 features.

We computed KernelSHAP explanations on the dataset. For each label, we display the 10 features with the greatest feature attribution. You have 1 label(s).



Appendix: Analysis Configuration Parameters

```
{
  "dataset_type": "text/csv",
  "headers": [
    "Churn",
    "Account Length",
    "VMail Message",
    "Day Mins",
    "Day Calls"
```

Day Calls",
"Eve Mins",
"Eve Calls",
"Night Mins",
"Night Calls",
"Intl Mins",
"Intl Calls",
"CustServ Calls",
"State_AK",
"State_AL",
"State_AR",
"State_AZ",
"State_CA",
"State_CO",
"State_CT",
"State_DC",
"State_DE",
"State_FL",
"State_GA",
"State_HI",
"State_IA",
"State_ID",
"State_IL",
"State_IN",
"State_KS",
"State_KY",
"State_LA",
"State_MA",
"State_MD",
"State_ME",
"State_MI",
"State_MN",
"State_MO",
"State_MS",
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"State_NV",
"State_NY",
"State_OH",
"State_OK",
"State_OR",
"State_PA",
"State_RI",
"State_SC",
"State_SD",
"State_TN",
"State_TX",
"State_UT",
"State_VA",
"State_VT",
"State_WA",
"State_WI",
"State_WV",
"State_WY",
"Area Code_408",
"Area Code_415",
"Area Code_510",
"Int'l Plan_no",
"Int'l Plan_yes",
"VMail Plan_no",
"VMail Plan_yes"

```

],
"label": "Churn",
"predictor": {
  "model_name": "xgb-churn-pred-model-monitor-2023-03-15-0033",
  "instance_type": "ml.m5.large",
  "initial_instance_count": 1,
  "accept_type": "text/csv",
  "content_type": "text/csv"
},
"methods": {
  "report": {
    "name": "report",
    "title": "Analysis Report"
  },
  "shap": {
    "use_logit": false,
    "save_local_shap_values": false,
    "baseline": [
      [
        99.99700598802396,
        7.94940119760479,
        177.466766467066,
        101.59281437125749,
        203.8122754491018,
        101.55089820359281,
        202.00209580838327,
        98.23053892215569,
        10.125748502994012,
        4.577844311377246,
        1.4281437125748504,
        0.03053892215568862,
        0.033832335329341316,
        0.019161676646706587,
        0.02245508982035928,
        0.004790419161676647,
        0.01407185628742515,
        0.02634730538922156,
        0.026646706586826347,
        0.01526946107784431,
        0.027275449101796405,
        0.018323353293413173,
        0.012365269461077844,
        0.00940119760479042,
        0.021407185628742515,
        0.021437125748502994,
        0.01847305389221557,
        0.03023952095808383,
        0.02149700598802395,
        0.009550898203592815,
        0.027544910179640718,
        0.0275748502994012,
        0.027604790419161675,
        0.01565868263473054,
        0.015688622754491018,
        0.0037425149700598802,
        0.015748502994011974,
        0.02775449101796407,
        0.01880239520958084,
        0.015838323353293413,
        0.012874251497005988,
        0.018892215568862277,
        0.02191616766467066,
        0.009970059880239522,
        0.018982035928143712,
        0.013023952095808382,
        0.02500000000000000
      ]
    ]
  }
}

```

```
0.025029940119760476,  
0.016077844311377244,  
0.022095808383233533,  
0.028113772455089822,  
0.016167664670658683,  
0.02817365269461078,  
0.025209580838323354,  
0.02224550898203593,  
0.022275449101796407,  
0.019311377245508982,  
0.03131736526946108,  
0.01937125748502994,  
0.013413173652694612,  
0.03739520958083832,  
0.03143712574850299,  
0.019491017964071856,  
0.27999999999999997,  
0.46565868263473054,  
0.25808383233532933,  
0.9230538922155689,  
0.07946107784431138,  
0.7197604790419162,  
0.28308383233532936
```

```
    ]  
  ],  
  "num_samples": 100,  
  "agg_method": "mean_abs"  
}  
}
```