# **Analysis Report**

We report the following SageMaker analysis.

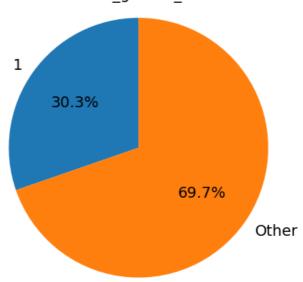
# **Pre-training Bias Metrics**

We computed the bias metrics for the label fraud using label value(s)/threshold 0.

## • customer\_gender\_female

The groups are represented in the dataset with the following proportions.





#### Value(s)/Threshold: 1

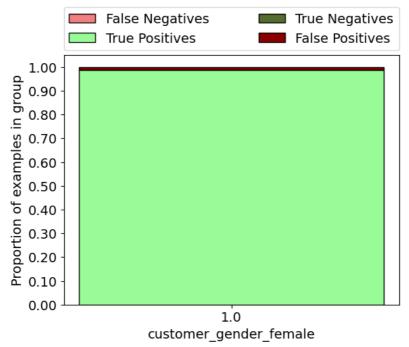
name	description	value	error
CDDL	Conditional Demographic Disparity in Labels (CDDL)	None	Group variable is empty or not provided
CI	Class Imbalance (CI)	0.394	NaN
DPL	Difference in Positive Proportions in Labels (DPL)	-0.018112	NaN
JS	Jensen-Shannon Divergence (JS)	0.002017	NaN
KL	Kullback-Liebler Divergence (KL)	0.009542	NaN
KS	Kolmogorov-Smirnov Distance (KS)	0.018112	NaN
LP	L-p Norm (LP)	0.025614	NaN
TVD	Total Variation Distance (TVD)	0.018112	NaN

# **Post-training Bias Metrics**

We computed the bias metrics for the label fraud using label value(s)/threshold 0.

### • customer\_gender\_female

The labels and predictions of the group have the following proportions.



Positive labels = TP + FN --- Used in the following metrics: DPL, JS, KL, KS, LP, TVD

Negative labels = TN + FP

Positive predictions = TP + FP --- Used in the following metrics: DI

Negative predictions = TN + FN

Accuracy = TP + TN --- Used in the following metrics: AD Recall = TP / (TP + FN) --- Used in the following metrics: RD Precision = TP / (TP + FP) --- Used in the following metrics: DAR

## Value(s)/Threshold: 1

name	description	value	error
AD	Accuracy Difference (AD)	-0.017753	NaN
CDDPL	Conditional Demographic Disparity in Predicted Labels (CDDPL)	None	Group variable is empty or not provided
DAR	Difference in Acceptance Rates (DAR)	-0.017764	NaN
DCA	Difference in Conditional Acceptance (DCA)	-0.017764	NaN
DCR	Difference in Conditional Rejection (DCR)	Infinity	NaN
DI	Disparate Impact (DI)	1.000359	NaN
DPPL	Difference in Positive Proportions in Predicted Labels (DPPL)	-0.000359	NaN
DRR	Difference in Rejection Rates (DRR)	-1.0	NaN
FT	Flip Test (FT)	0.0	NaN
RD	Recall Difference (RD)	0.0	NaN
TE	Treatment Equality (TE)	0.0	NaN