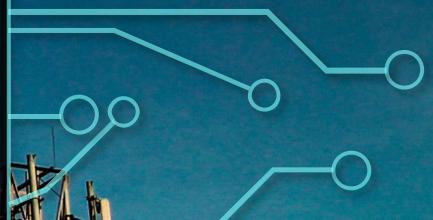




TELECOM CHURN

JOSHUA EDELSTEIN



AGENDA



1. ADDRESS
STAKEHOLDER



2. DATA
BACKGROUND



3. PREDICTIVE MODEL



4. CONCLUSION/
RECOMMENDATIONS



5. NEXT STEPS

BUSINESS QUESTION



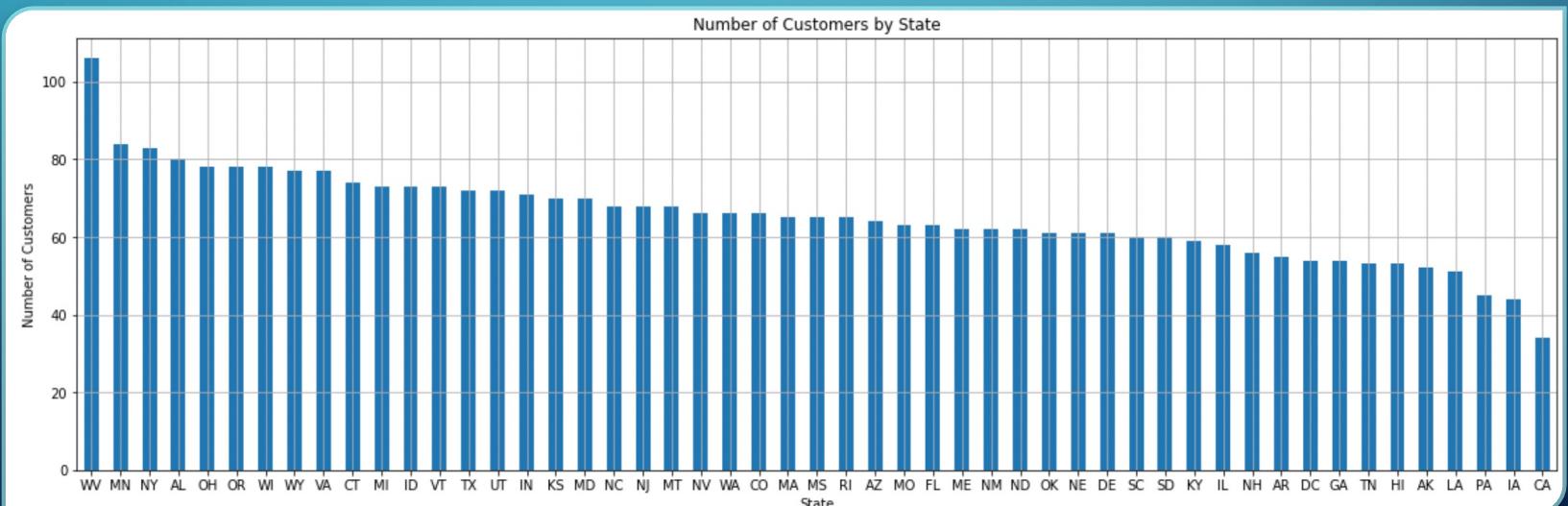
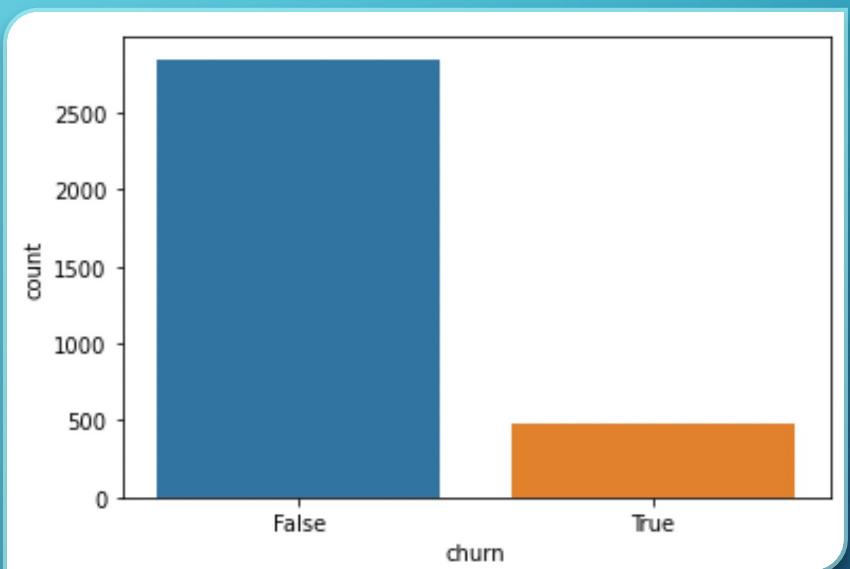
SyriaTel- How to best prevent customer churn?



Can't afford large advertising campaign

DATA UNDERSTANDING

- Over 3,000 clients from across USA
- Data from ~2010
- 14% churn rate



DATA UNDERSTANDING

- Data Information
 - Numeric (calls throughout the day, international calls, customer service)
 - Categorical(state, international plan, voicemail plan)



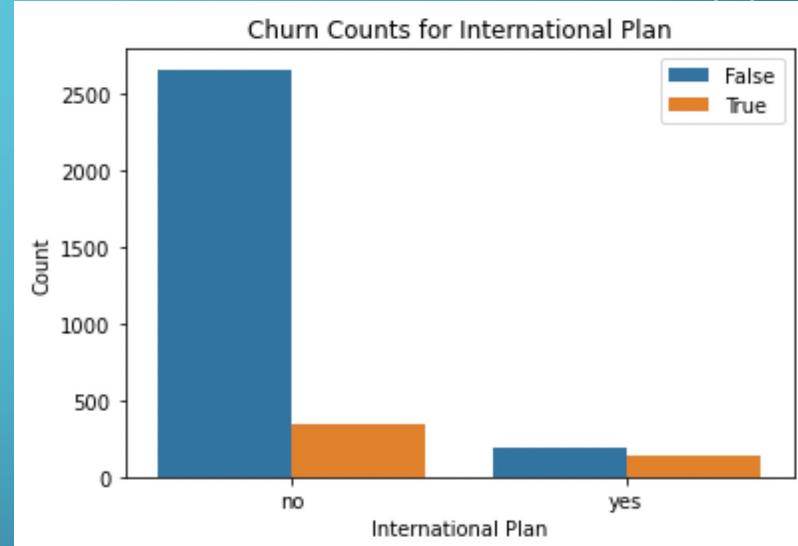
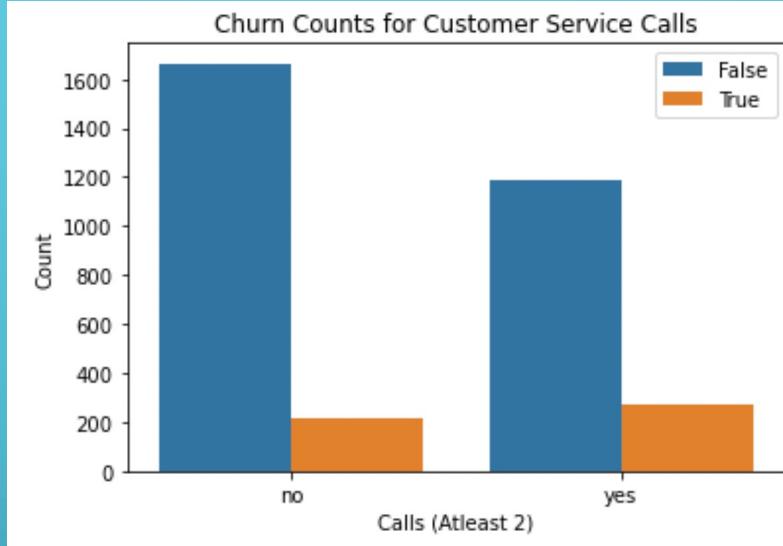
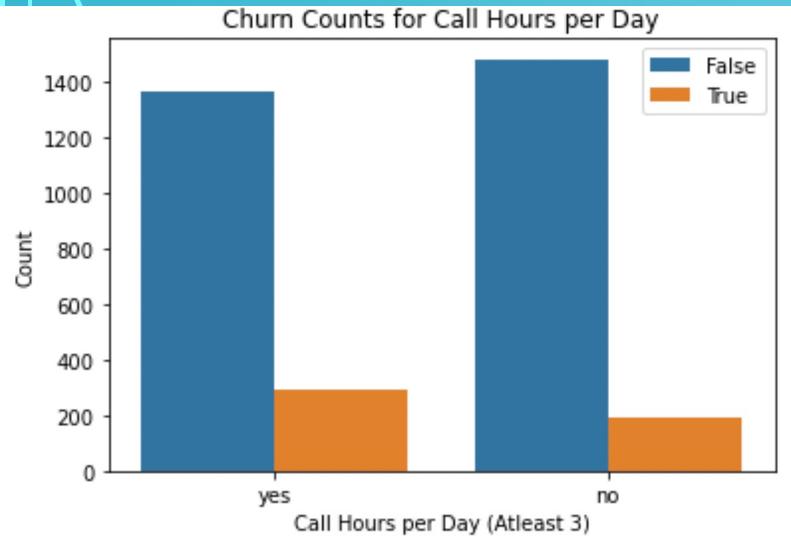
MODELING

PRECISION VS RECALL

- False Positive- Giving away unnecessary promotional deals
 - Precision
- False Negative- Losing Clients
 - Recall



MOST IMPORTANT FEATURES

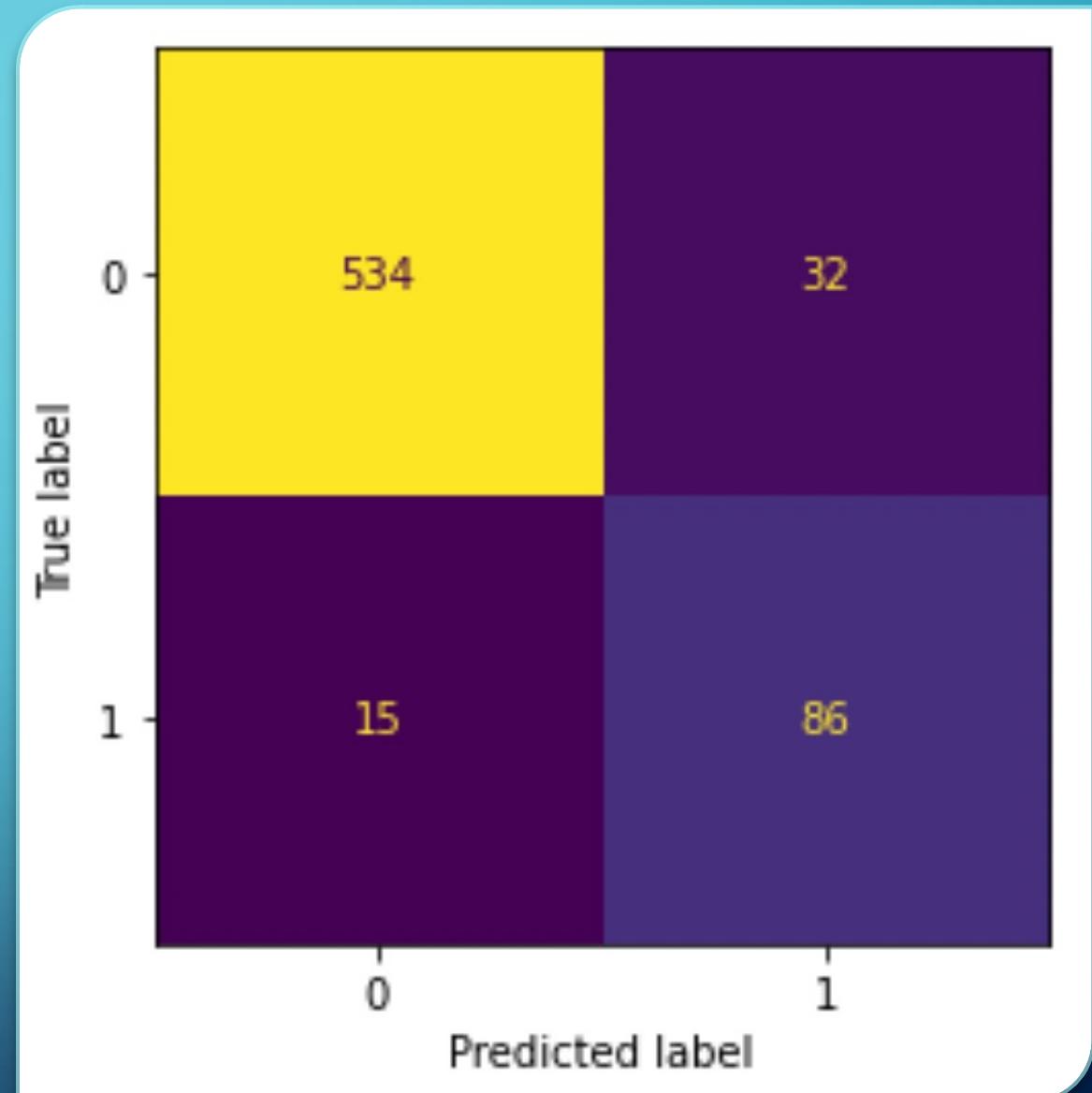


- Call Hours during the day
 - Churn is higher for those above 3 hours
- Customer Service Calls
 - Churn is higher for those with 2 or more calls
- International plan
 - Churn is lower for those without it

MODEL METRICS

Final Model Scoring:

- Accuracy score 93%
- Precision of 73%
- Recall of 85%
- F1-score of .79



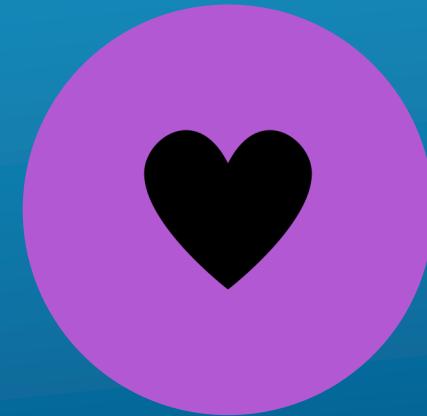
RECOMMENDATIONS



OFFER PROMOTIONAL DEALS
TO HIGH RISK CUSTOMERS



INVEST IN CUSTOMER SERVICE



CREATE BRAND LOYALTY



GOING FORWARD

- Compare different forms of promotional offers
- Analyze what creates Brand Loyalty

A photograph of a man with short brown hair and a beard, wearing black-rimmed glasses, smiling and talking on a black corded telephone receiver held to his right ear. He is seated at a desk, looking down at a silver laptop computer. In the background, there are white horizontal blinds covering a window, and another person's head is visible behind him, also working at a desk.

THANK YOU

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