

Predictive analytics

Health & wellness firm

- Built a predictive model to identify key factors that impact customer retention to improve customer targeting
- Partnered with the client's sales team to customize communication for various customer groups to improve acquisition efficiency, driving greater than 10pps higher retention rates across the target cohort

Health and wellness company needs predictive analytics

Picture this...

You're looking for the key features of existing high-value customers and building a predictive model to identify prospective high-value customers. Currently, you identify potential high-value customers who had taken the self-assessment survey on the website but did not convert to a sale.

You turn to Accordion.

We partner with your team to build a predictive model to identify key factors that impact customer retention to improve customer targeting, including:

- 1) Building multiple classification models to identify key pre-conversion features of current high value customers
- 2) Using various modeling & optimizing techniques, identifying the best performing model for each subset of customers
- 3) Identifying the potential high value customers and enabling the sales team to customize their marketing pitch to acquire these customers
- 4) Identifying list of customers to re-target based on their prior website interactions and questionnaire responses

Your value is enhanced.

- You have customers targeted by the model had 10% higher retention rates than the regular customer base, leading to ~5% increase in revenues. You also have customized communication helped improve customer acquisition and retention, leading to ~10% higher customer lifetime value (CLTV).

PREDICTIVE ANALYTICS

KEY RESULT

- 10% higher retention rates
- ~5% increase in revenues
- ~10% higher customer lifetime value

VALUE LEVERS PULLED

- Predict high value prospect customer

Identifying high-value customers for re-targeting

Situation

- There was a need to identify potential high-value customers who had taken the self-assessment survey on the client's website but did not convert to a sale
- Partnered with the client to identify key features of existing high-value customers and built a predictive model to identify prospective high-value customers

Accordion Value Add

- Built multiple classification models to identify key pre-conversion features of current high value customers
- Using various modeling & optimizing techniques, identified the best performing model for each subset of customers
- Identified the potential high value customers and enabled the client's sales team to customize their marketing pitch to acquire these customers
- Identified list of customers to re-target based on their prior website interactions and questionnaire responses

Impact

- Customers targeted by the model had 10% higher retention rates than the regular customer base, leading to ~5% increase in revenues
- Customized communication helped improve customer acquisition and retention, leading to ~10% higher Customer Lifetime Value (CLTV)

Methodology/ approach

DATA EXPLORATION AND CLEANING

- Explored, identified, and cleaned the client data sources to make the data usable for modeling

FEATURE ENGINEERING

- Performed Statistical Tests (Correlation, P-test, T-test, ANOVA, Chi-squared) to identify key pre-conversion customer features for the model
- Built new features (pill frequency, BMI, etc.) based on the existing features to increase the number of features in the model
- Incorporated the categorical variables into the model, converting them to numbers using different encoding techniques (dummy encoding, level encoding)

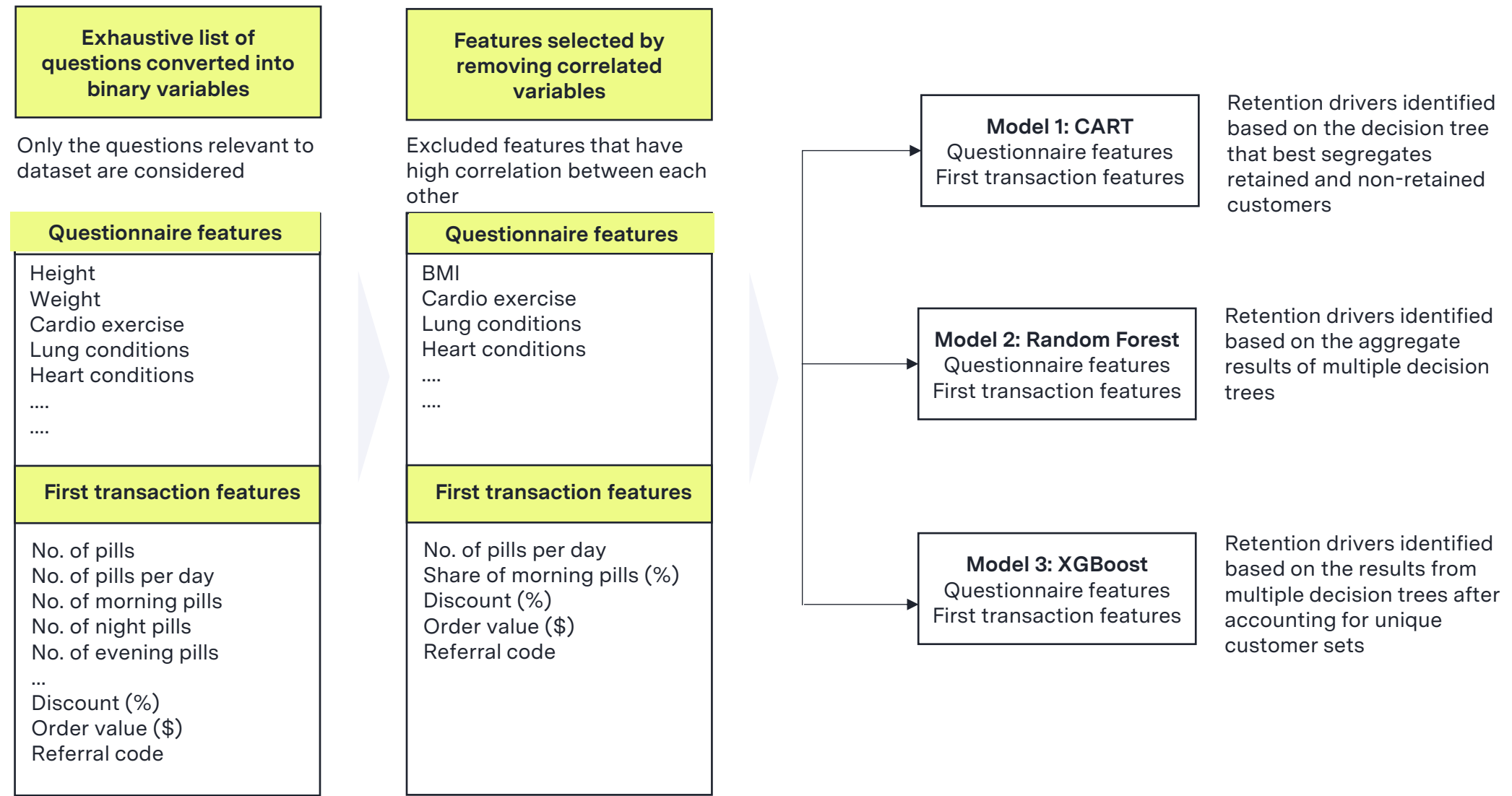
MODEL BUILDING & TESTING

- Built a base model using a simple classifier. Then, tested multiple algorithms on multiple subsets of data and optimized the output for these various models using techniques (cross validation, hyper-parameter tuning, etc.) to arrive at the best performing model for each subset of data

MODEL DEPLOYMENT & MAINTENANCE

- Generated and shared a list of potential high value customers and then collaborated with the sales team to create customized communication to improve acquisition
- Continued to monitor the model performance to ensure expected accuracies and anticipated potential refreshes of the model

Methodology: Identifying key drivers of customer retention



Identifying top respondents by retention probability

Distribution of respondents by probability to retain

