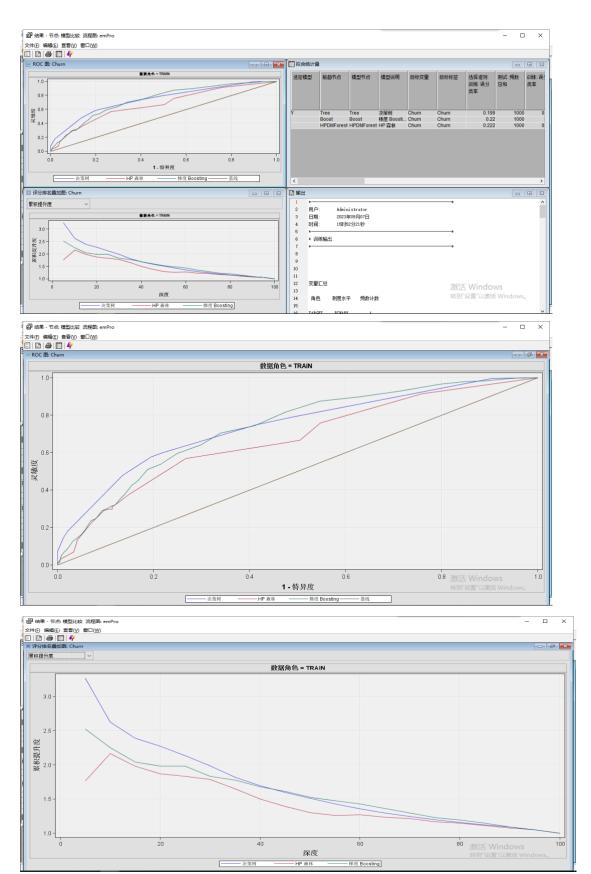
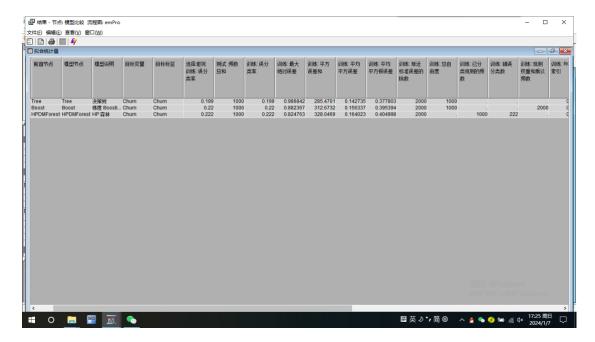
Results and Analysis





SAS helped me figure out which factors were most important in predicting whether a customer would leave us. The age of our customers, how much they spend, and the price of our products are particularly critical. It's interesting that older customers seem to have different departure patterns than younger customers. And it seems that customers who spend more are more likely to stay. Gender seems to have little impact on whether a customer will churn.

The models we used, especially ensemble methods like random forests and gradient boosting, worked well, especially in terms of accuracy and generalization, compared to decision trees alone.

With this information, I think we can do this:

- 1. Create some holiday or specific discounts: For those customers who may be about to leave, especially young people or those who don't spend much overall, we can create some discounts or loyalty programs to make them feel more valued and increase their trust in the brand. of loyalty.
- 2. Refining customer groups: We can use decision tree analysis to divide customers into different groups, and customize different marketing strategies based on their shopping habits and basic information.
- 3. Re-examine pricing: Since product price is so important, we may need to rethink our pricing strategy to ensure that the price is both competitive and that customers feel they are worth their money.
- 4. More feedback and engagement: We need to understand why customers choose to leave and improve based on their feedback. This way we can better retain customers and increase their satisfaction.