

Customer Lifetime Value (CLV) Analysis for HelloFresh

Objective

This report summarizes insights from a CLV prediction model developed to optimize customer retention and personalization strategies for subscription-based food businesses like HelloFresh.

Model Performance

- R^2 Score: 0.99966 (Model explains almost all CLV variance)
- Mean Absolute Error (MAE): 16.91
- Mean Squared Error (MSE): 700.04
- Indicates strong model accuracy but potential overfitting concerns.

Key Insights

- Customers with more total orders and higher average order value tend to have the highest CLV.
- Cancellations impact CLV significantly; customers who cancel early have much lower CLV.
- Order frequency plays a smaller role than expected; total orders are more indicative of CLV.

Business Impact

- AI-powered personalization can increase customer engagement.
- Dynamic pricing strategies based on CLV predictions can optimize revenue.
- Identifying at-risk customers early allows for targeted retention campaigns.

Recommendations

- Integrate CLV scores into HelloFresh marketing & CRM tools.
- Use ML-based recommendations to personalize meal plans.
- Develop an AI-powered churn prevention model.
- Test targeted incentives to increase customer retention.