



# Model Explanation

In the following slides, we are going to explain the two main components of our web app: CLV & Product Recommendation



# Increasing Profits Using CLV/RFM Analysis

## CLV/RFM Analysis

To be able to effectively target customers, we analyzed their customer lifetime value (CLV), which we calculated using DCF (discounted cash flow). On top, we performed an RFM (Recency, Frequency, Monetary Value) Analysis of the customer base, calculating the probability of repeat purchases and customers coming back in the next month.



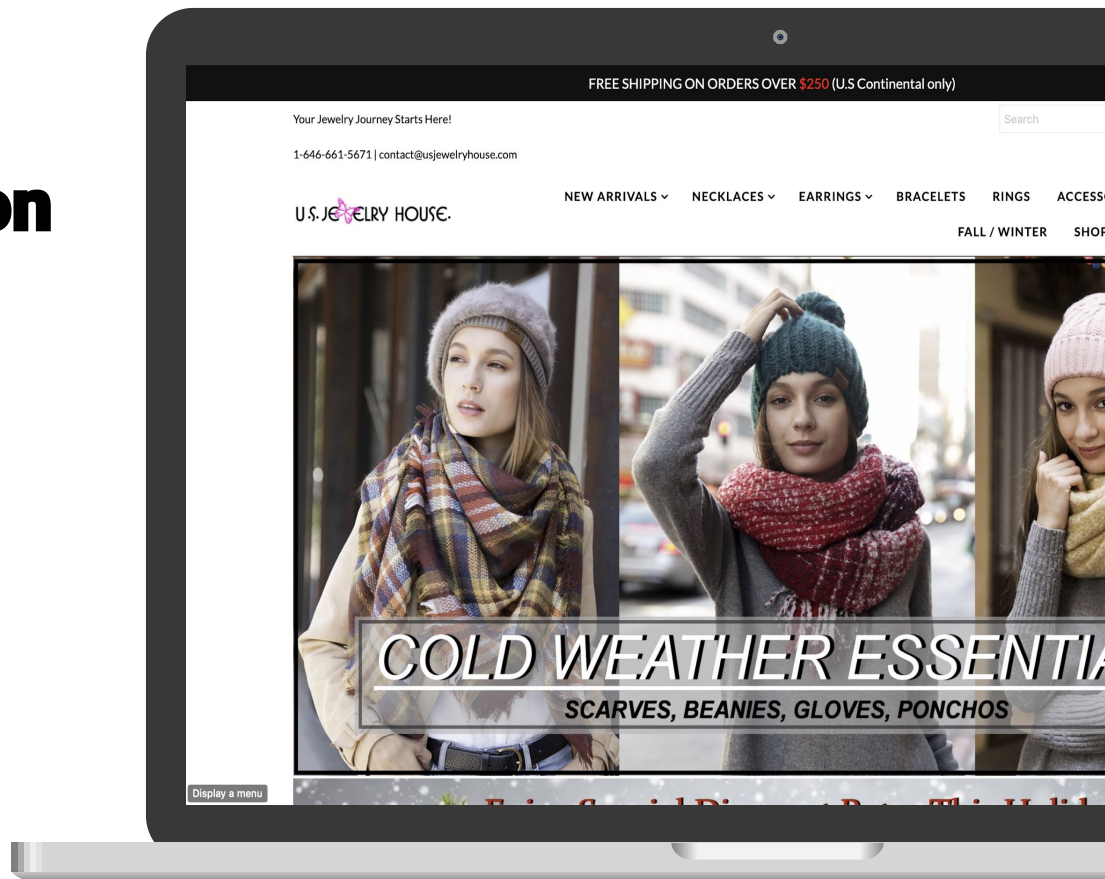
# Product Recommendation

## Association Rules

To give product recommendations, we analyzed what products were frequently bought together

## Flexibility

The recommendation tab allows the business to select items it wants to put on sale



# How Does It Work?



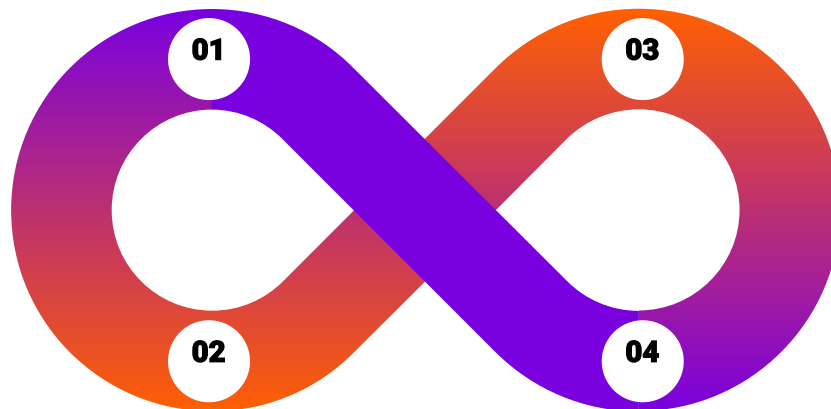
## ORDER INFORMATION

It all begins with the order information from our data that tells us which products have been bought together and in which frequency



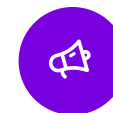
## DATA PREPARATION

To process the data, we needed to clean & restructure it



## ASSOCIATION RULES

Using association rule mining, we identified the most frequently bought together items



## RECOMMENDATION

Based on the association rules, we are now able to give product recommendations that have a high probability of being attractive to customers

# Product Recommendation Workflow

## BUSINESS OWNER LIST

Owner creates a list of products they wish to promote or discount

## PRODUCT RECOMMENDATION

Model runs in background and identifies items that were most frequently bought in association with items in shopping cart. If there should be a match with the business owner list created in step 1, the model will prioritize the item from the recommendation list

## CUSTOMER SHOPPING CART

Customers add items to their shopping cart

