Inventory management for Etsy small business

By Dariga Kokenova
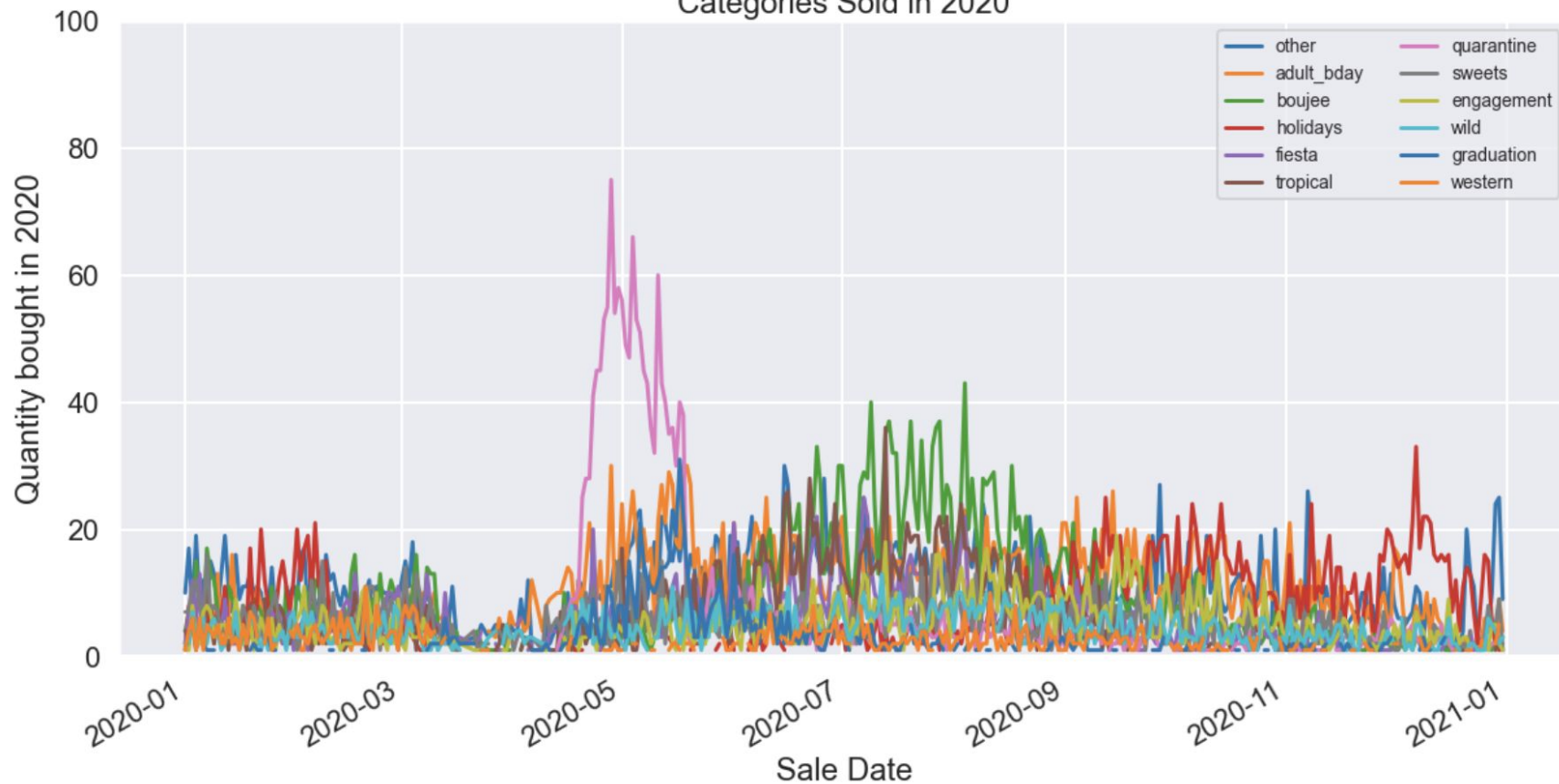
Data overview:

Source:
- 2020 sales data provided by small business owner
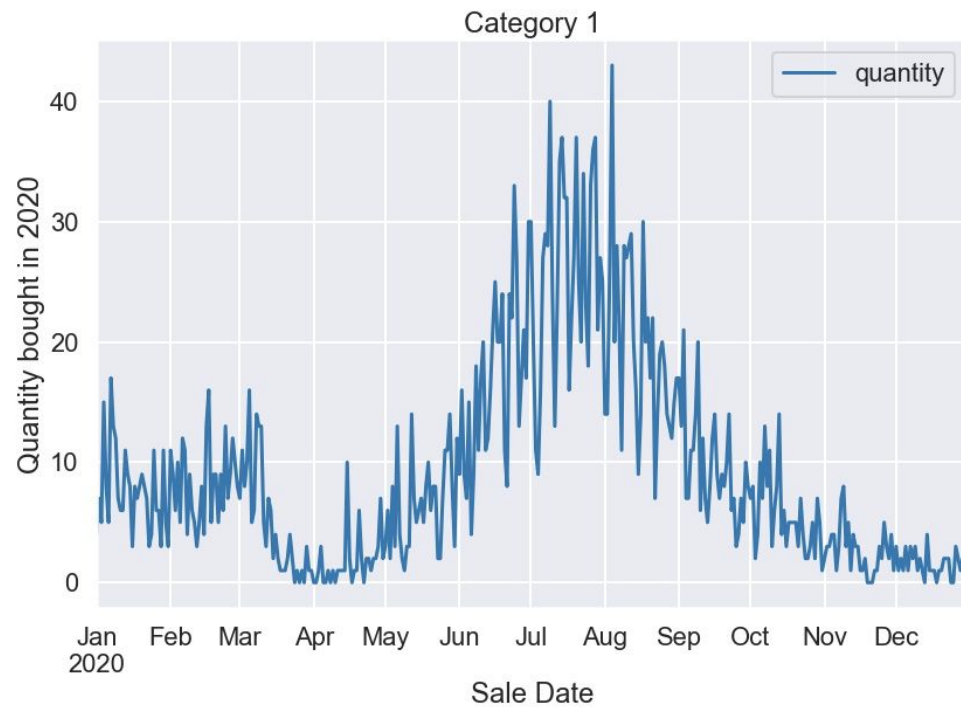- Detailed item description obtained from Etsy API

Data volume:
- 26,665 daily sales observations
- 700 item descriptions currently sold on Etsy
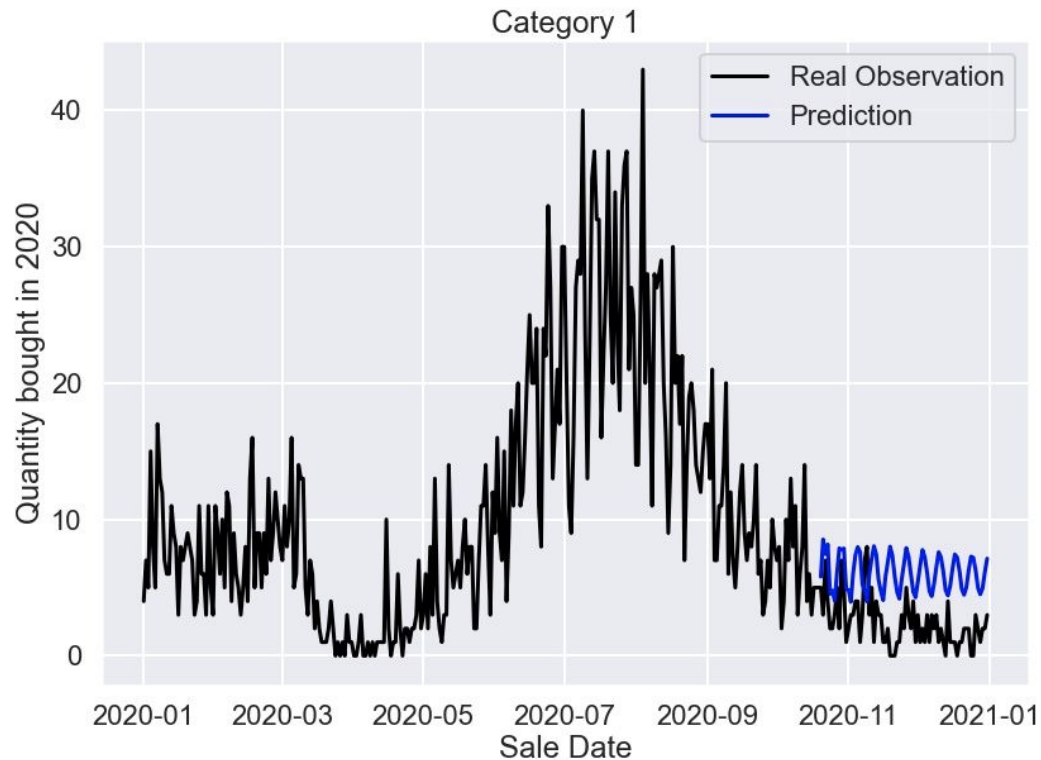
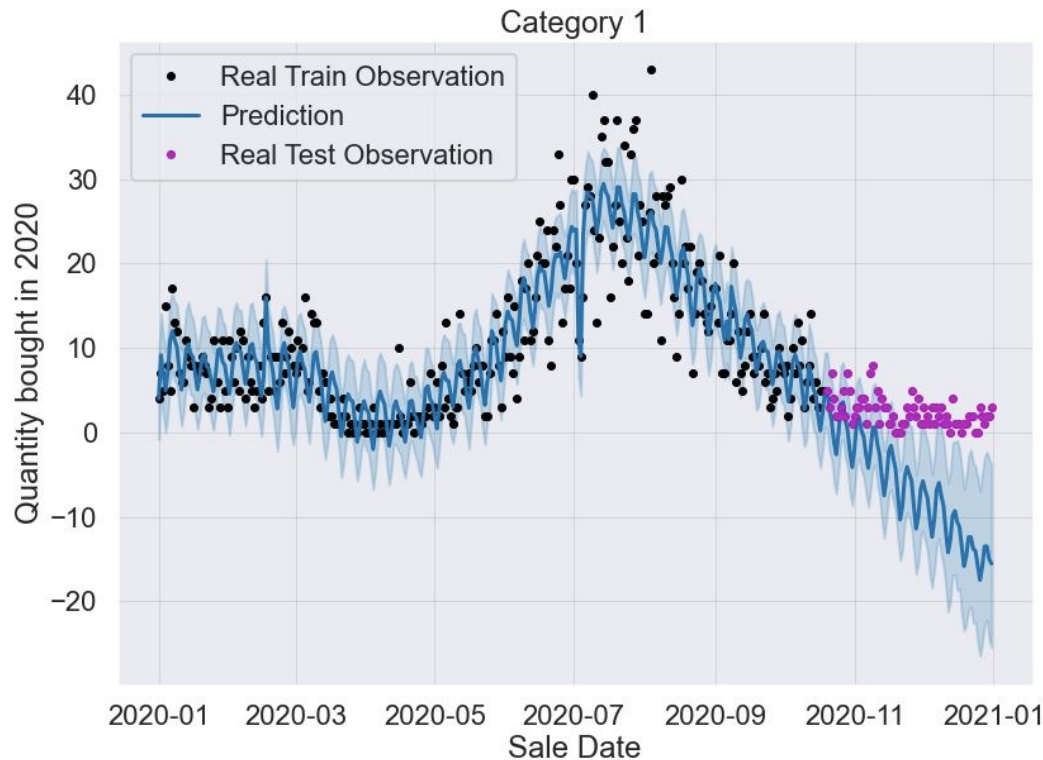Range of Time: 01/01/2020 - 12/31/2020

Categories Sold in 2020

Legend: other, adult_bday, boujee, holidays, fiesta, tropical, quarantine, sweets, engagement, wild, graduation, western

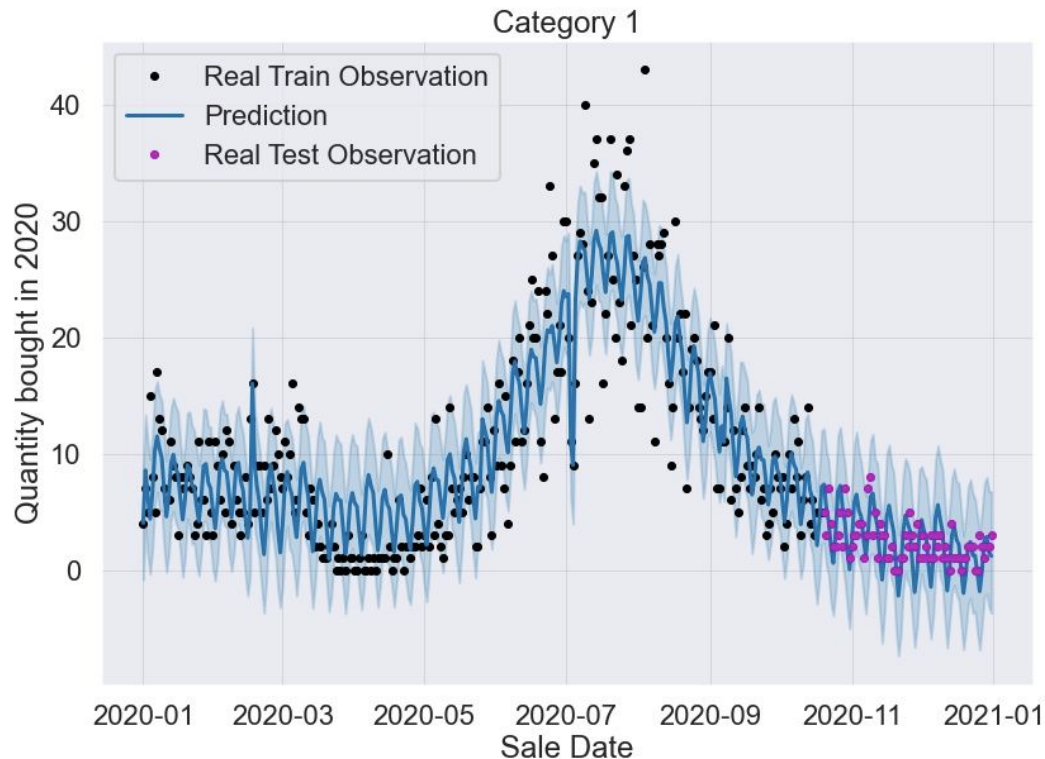# Category 1

Category 1: ARIMA (order=4,1,5)

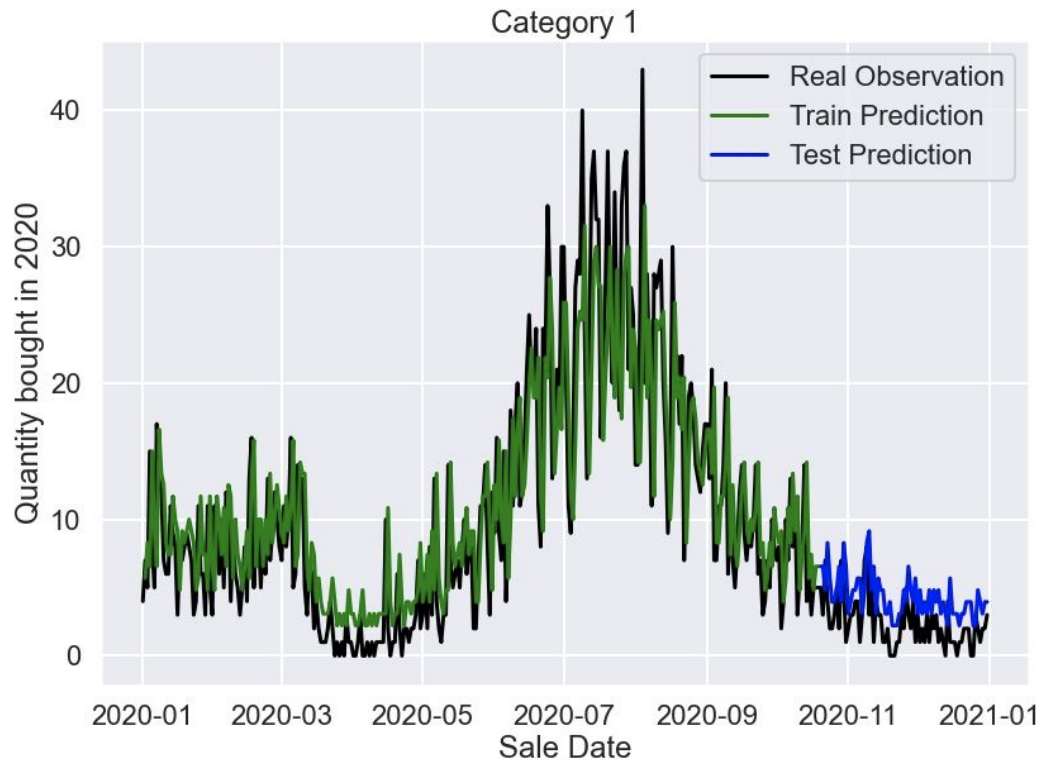# Category 1: Linear FB Prophet (monthly seasonality)

Category 1

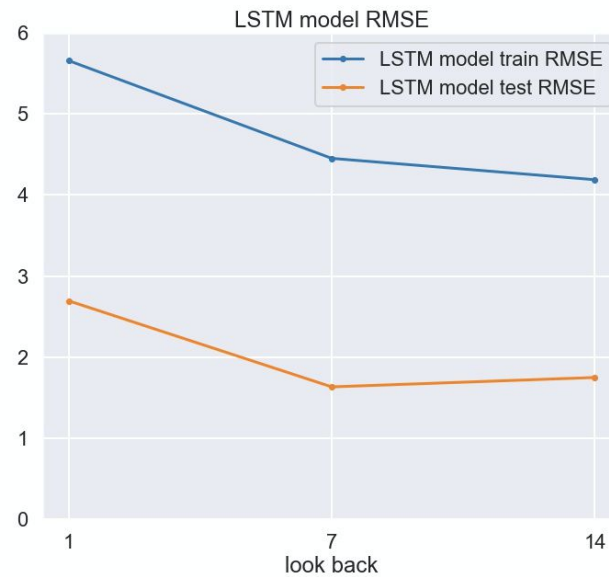# Category 1: Logistic FB Prophet (monthly seasonality)

Cap = 100
Floor = 0

Category 1

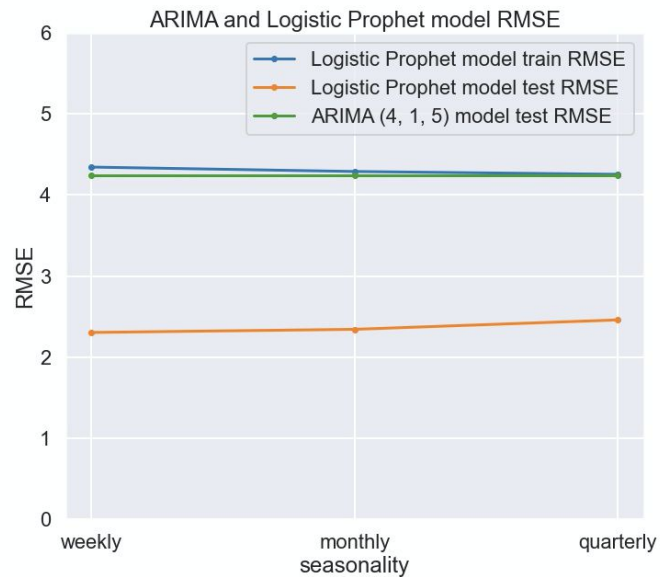# Category 1: LSTM Networks (look_back=1)

Evaluation: RMSE

Next Steps

- Add exogenous variable(s)
- Add SARIMAX model
- Add LSTM with Conv1D model

Questions?

GitHub: https://github.com/darigak/Inventory_management

LinkedIn: https://www.linkedin.com/in/darigakokenova/