



Cross- Validation: Predicting Sales





Behara Study: Predicting Sales

Dependent Variable: Item Sales in a Store (p. 423)

Independent Variables: Store and Item Characteristics (p. 423)

Measure of Model Fit: RMSE



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Dependent Variable Description (p. 425)

Independent Variables Description?

Exploratory Data Analysis (p. 429)



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Model Description



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Cross-Validation: 20 K-fold cross validation (p. 428)

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Table 1. Comparison of cross validation score of different model

| Model | Cross validation score (Mean) | Cross validation score (Std) |
|-------------------|-------------------------------|------------------------------|
| Linear regression | 1129 | 43.24 |
| Decision tree | 1091 | 45.42 |
| Ridge regression | 1097 | 43.41 |



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Table 2. Comparison of MAE and RMSE of proposed model with other model

| Model | MAE | RMSE |
|-------------------|---------------|-------------|
| Linear regression | 836.1 | 1127 |
| Decision tree | 751.6 | 1068 |
| Ridge regression | 836 | 1129 |
| Xgboost | 749.03 | 1066 |