**Machine Learning: Predicting Price Change**

| Model Type | | Train Accuracy | Test Accuracy |
| --- | --- | --- | --- |
| Bayesian Classifier | *Feature Selection* All Themes+SOURCE (Best: ENV,ECON,LEAD,SOURCE) | 0.8235 | 0.8667 |
| *Feature Selection* One-Week Average+Themes+SOURCE | 0.7941 | 0.8667 |
| ECON+LEAD+SOURCE | 0.8382 | 0.8333 |
| **SOURCE** | 0.8529 | 0.8000 |
| **All Themes+Source** | 0.8235 | 0.8000 |
| ***Feature Selection* All Themes** | 0.7206 | 0.7333 |
| **ENV** | 0.6324 | 0.7333 |
| **All Themes** | 0.7500 | 0.6667 |
| **ECON** | 0.7647 | 0.6667 |
| **One-Week Average** | 0.5882 | 0.6333 |
| **LEAD** | 0.6471 | 0.5667 |
| **One-Week Average+All Themes (sans ENV)** | 0.6765 | 0.5667 |
| **LEGAL** | 0.6176 | 0.5333 |
| **SOC** | 0.6765 | 0.4667 |
| Linear Regression | **One-Week Average** | 0.1991 | 0.1436 |
| **Feature Selection All Themes** | 0.2090 | 0.1317 |
| **Themes** | 0.2369 | 0.1169 |

\*Feature selection selects top features