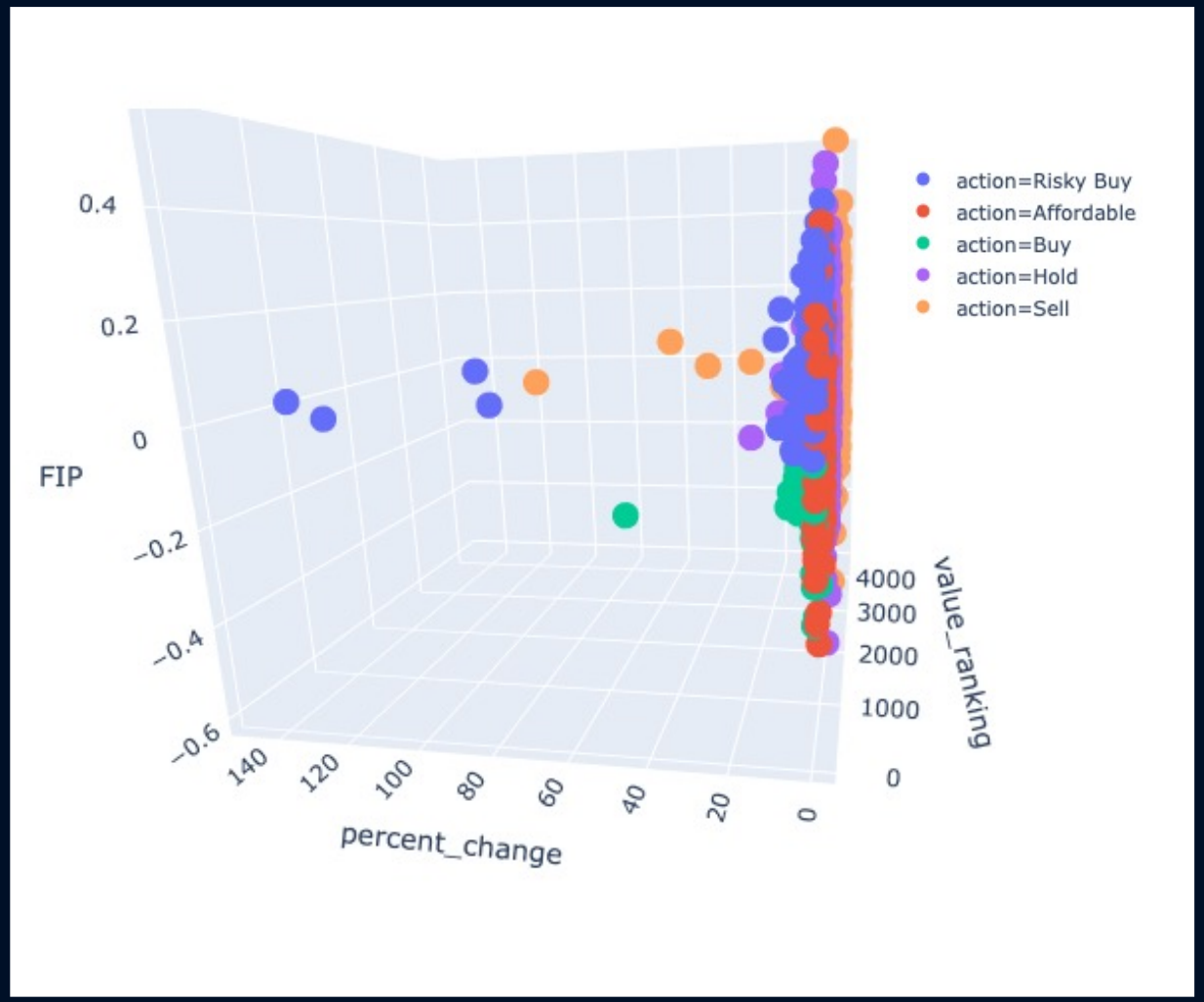
Finding Stock Market Inefficiencies

ANALYSIS BY BRIAN BENTSON

Business Goal

find which stocks offer the unique combination of low cost, growing and low volatility



1 Use machine learning to find which companies are:

- Inexpensive, relative to their performance
- Growing in value
- Low volatility

2 Use anomaly detection to find data quality issues

3 Visually interact with key KPI's to research potential stock purchases and sales

Data Overview

FMP

Financial Modeling Prep

- Sourced data from FMP's API
- 4311 stocks after removing null or negative values and removing highly volatile sectors
- Pulled company profile information, historical performance metrics and stock price

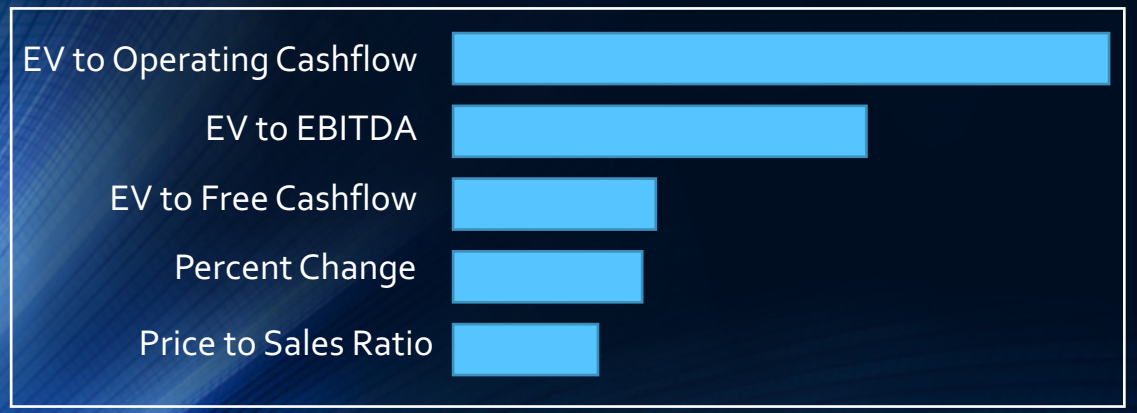
Machine Learning Results

96% Overall Accuracy in Predicting Action

1. Classification of Buy, Hold, Sell

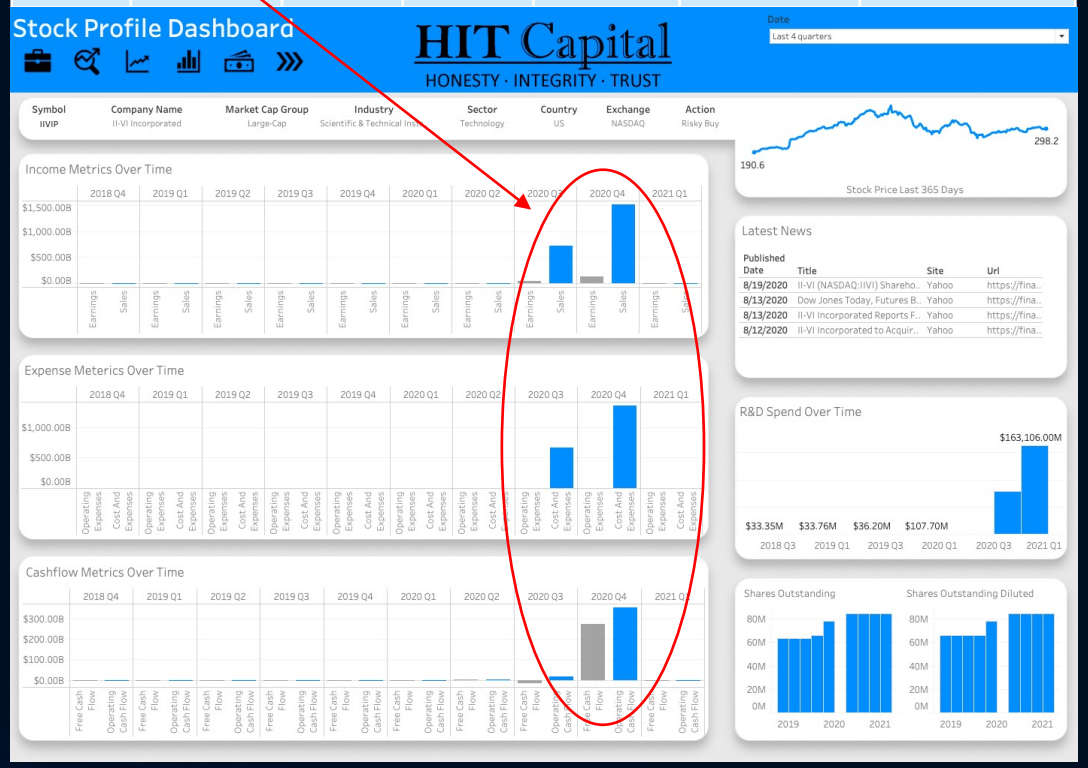
Percentage Correctly Classified

Model Feature Importances

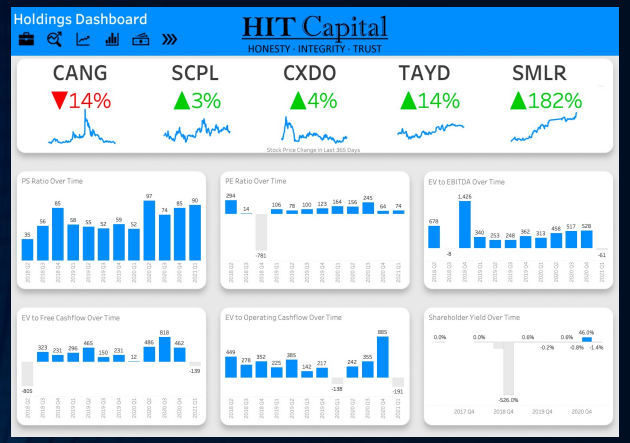


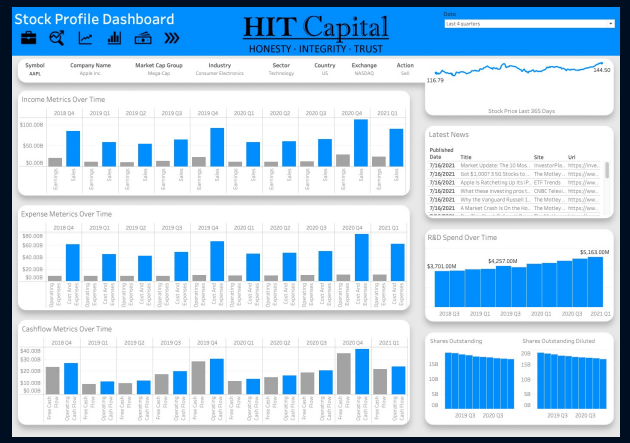
2. Anomaly Detection

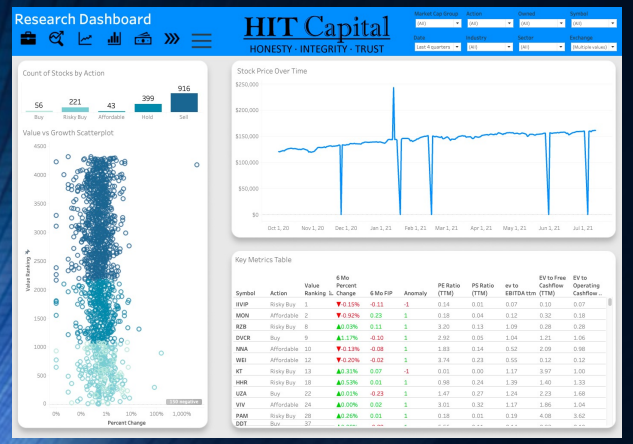
Symbol	Revenue Per Share	PE Ratio	PS Ratio	EV to EBITDA	EV to Free Cashflow	EV to Operating Cashflow
IIVIP	26,456	0.14	.01	.07	.1	.07

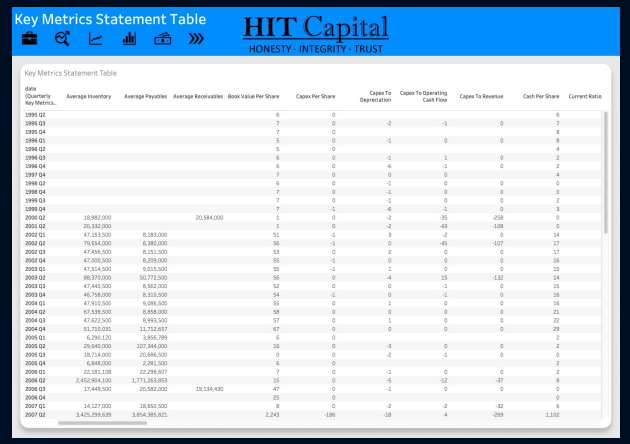


Dashboard









1 View performance of current holdings for potential sale

2 Research new companies to buy

3 Validate underlying data quality

Dashboard Demo

Thank you

Questions?

Appendix