# WIDE DEMOGRAPHIC

- Strategy
- Mythology
- Creativity
- Interactive
- OFF Screens
- Age Groups

PASSION

# TOURNAMENTS

# CARD & DECK

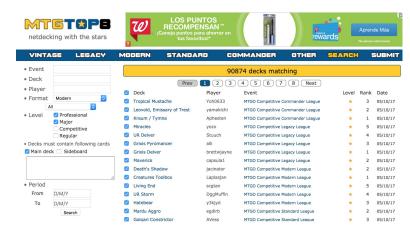# Question: Do MTG Tournaments Affect PRICE OF CARDS?

Can we predict the price of the cards in the long term?

# Data Collection

- 168 Tournaments
- 1000+ cards collected
- 2 years of stock data

Total Cards for MTG: 16K

Data Exploration

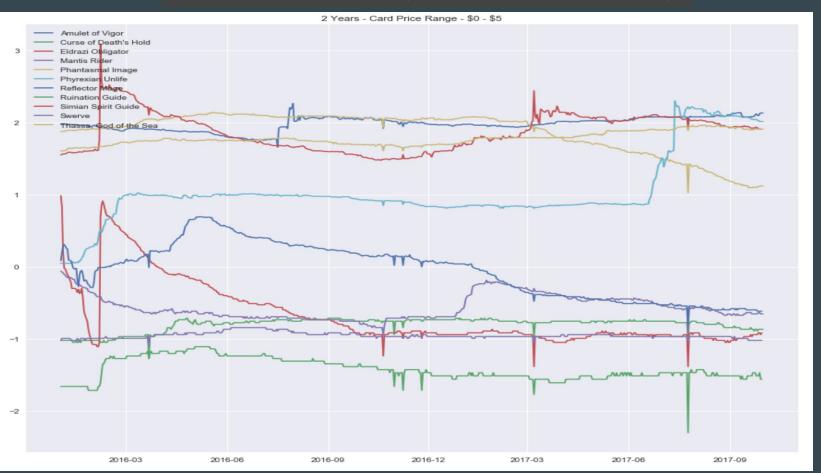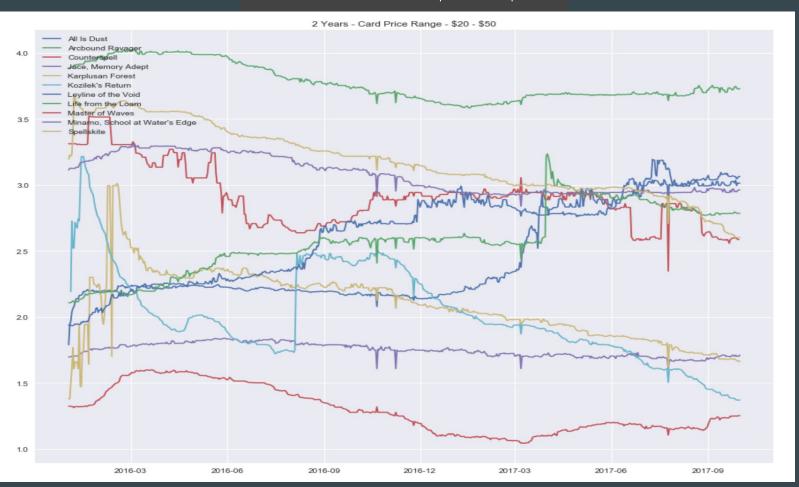# 2 Year Price < $5 (Typical for most cards)



2 Years - Card Price Range - $0 - $5

Legend:
- Amulet of Vigor
- Curse of Death's Hold
- Eldrazi Obligator
- Mantis Rider
- Phantasmal Image
- Phyrexian Unlife
- Reflector Mage
- Ruination Guide
- Simian Spirit Guide
- Swerve
- Thasss, God of the Sea
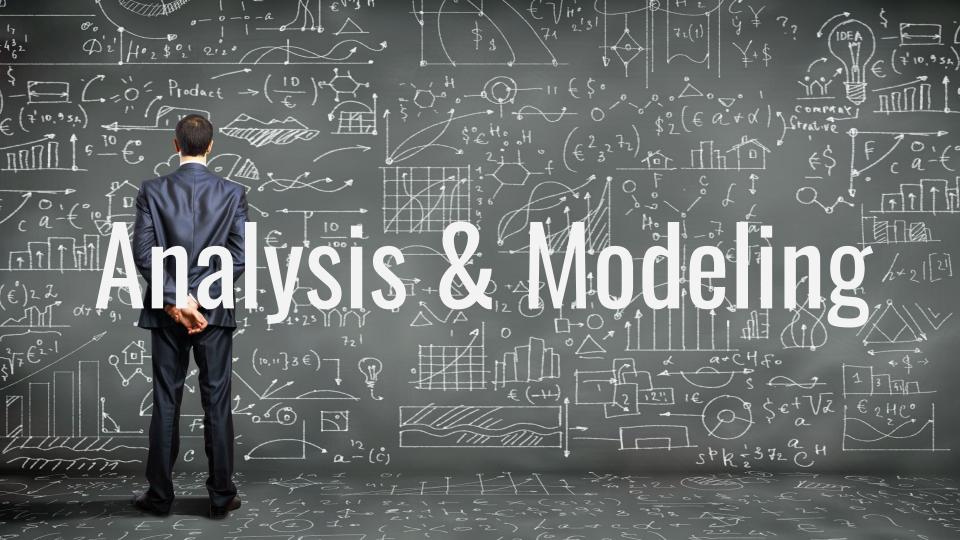
2 Year Price - $20 - $50

2 Year Price  - $50 - $100

2 Years - Card Price Range - $50 - $100

- Crucible of Worlds
- Fire-Lit Thicket
- Mana Confluence
- Marsh Flats
- Mishra's Bauble
- Sacred Foundry
- Steam Vents
- Temple Garden
- Through the Breach
- Through the Breach
- Vendilion Clique

Analysis & Modeling

# Linear vs Lasso Regression
# 1 month vs 3 month

|  | Linear | Lasso |
|---|---|---|
| Short Term<br>1-4 month prior | RMSE: 0.27 vs 1.71<br>R2: 0.99 | |
| Reg Price<br>1 year prior data | RMSE: 0.61 vs 0.64<br>R2: 0.71 vs 0.70 | RMSE: 0.61 vs 0.63<br>R2: 0.70 vs 0.70 |
| Filtered Price | RMSE: 0.0001 vs 0.001<br>R2: 0.99 vs 0.96 | RMSE: 0.0001 vs 0.001<br>R2: 0.99 vs 0.96 |

# FINDING

1. Price is Predictable in the short term & can be predicted using simple model
2. Tournament data didn't seem Significant Factor
3. Long Term Prediction is Likely given additional feature data

# CONCLUSION

1. Increase card sample group
2. Longer term data will need other models to address Spikes
3. Detect what Causes Price Spikes & predict likelihood of upcoming Spikes
4. Categorical Data