MAGIC: The Gathering ®

A Trading Card Price Predictor

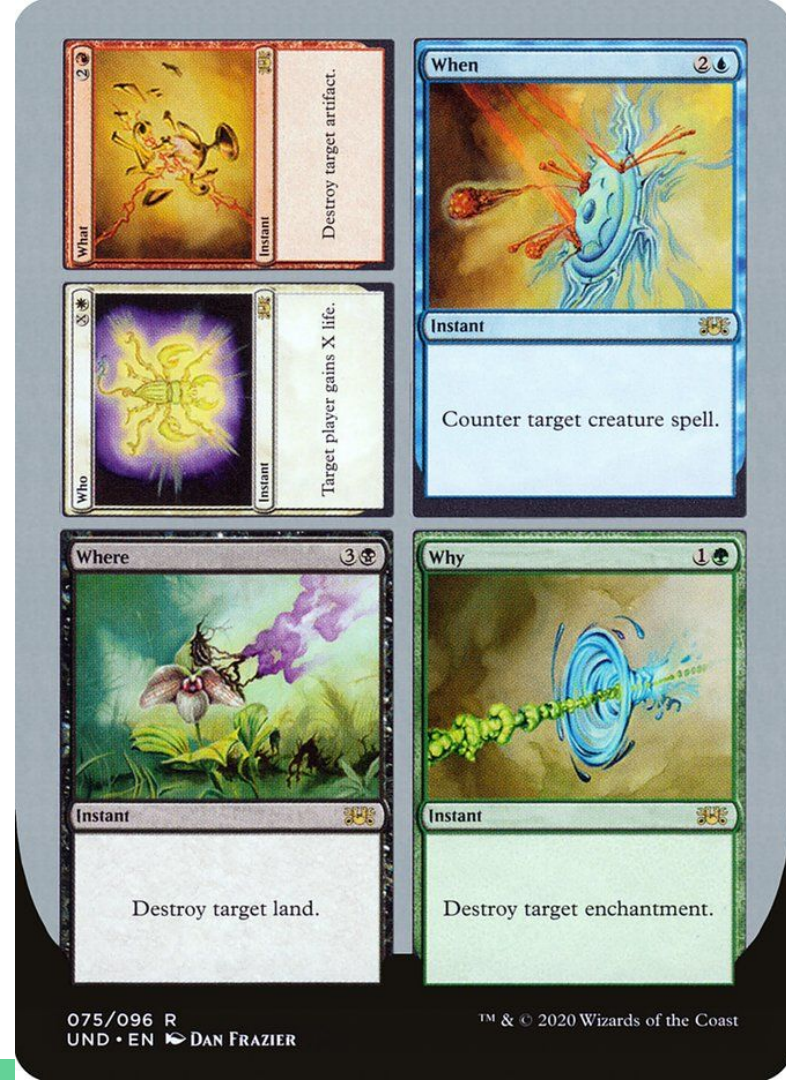*Liz Alvarez*

Problem Statement

Who: Magic Investors and Players

What: Card Price Predictor

When: Release of a New Set

Where: The United States

Why: Maximize Profit or Collection Value

Business Value

- Quickly marks valuable cards
- Investors can:
  - quickly buy valuable cards
  - wait for the value to increase
  - sell after prices have stabilized
- Players can:
  - quickly buy valuable cards
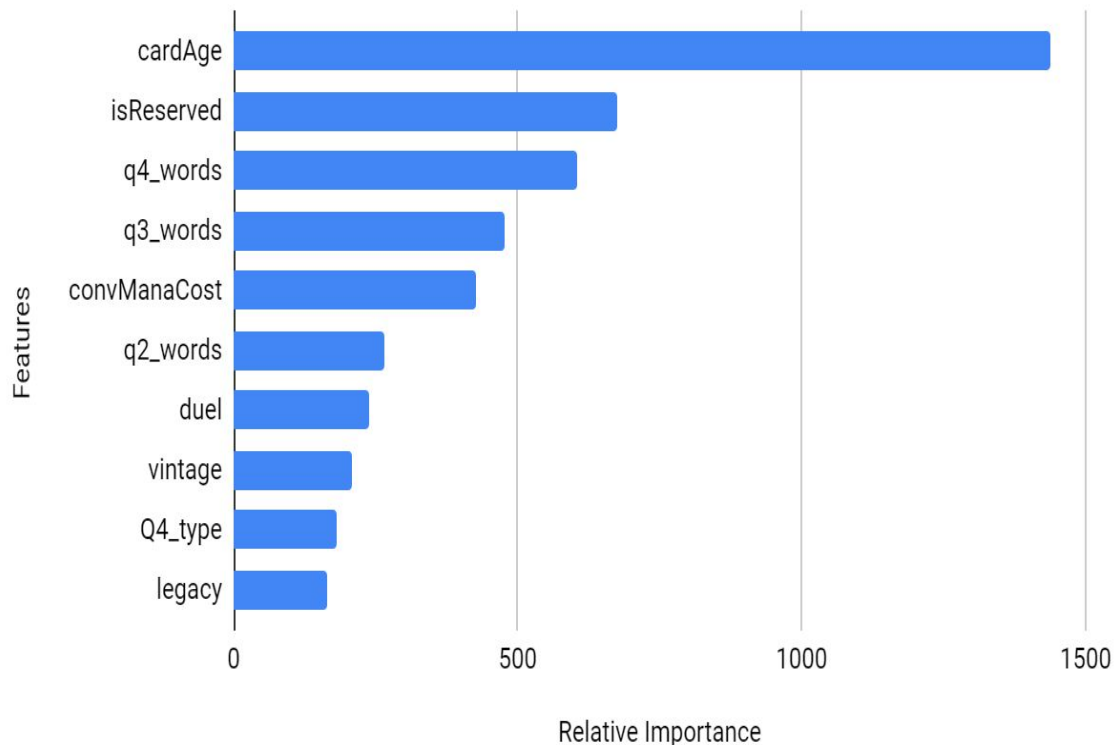 - increase the playability of their decks
  - save money

Methodology

- Gathered Data
- Sorted into Groups by Price
- Created Models
- Refined Models
- Chose the Best Model
- Predicted prices for

  Ikoria: Lair of Behemoths set
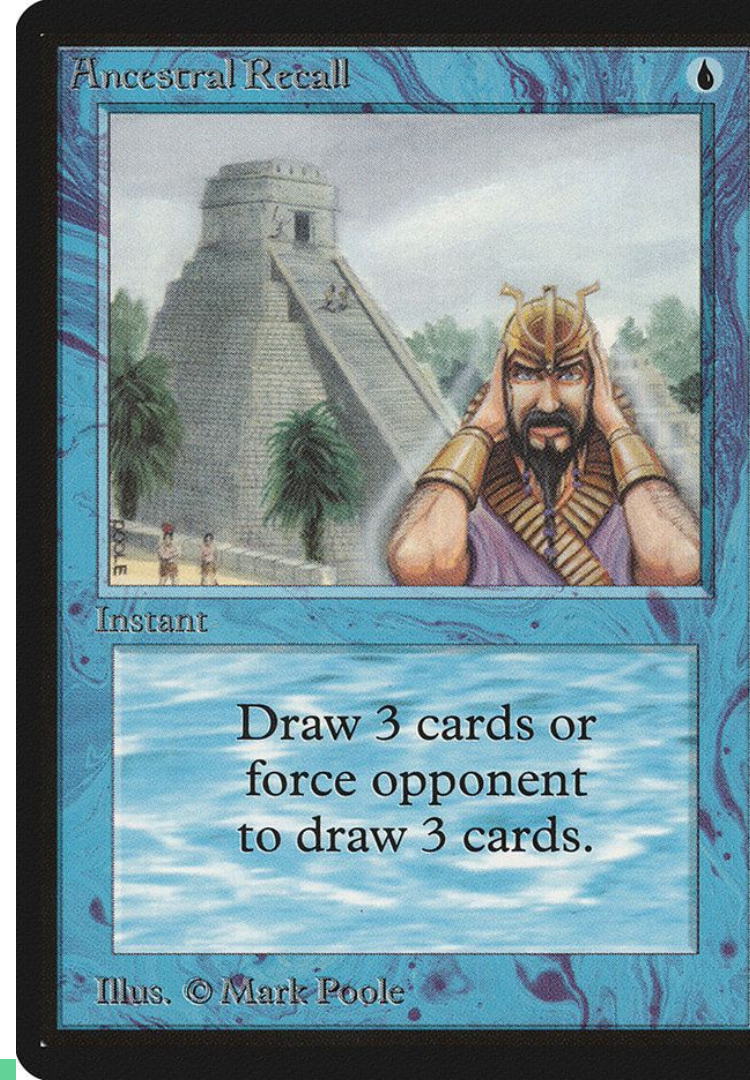
Findings

Relative Importance vs. Features

Recommendation

Finding:

Older cards are more expensive.

Recommendation:

Buy cards quickly and hold on to them for a long time.

Recommendation

Finding:

Cards with higher converted Mana costs are more expensive.

Recommendation:

When a new set comes out, buy cards with a high converted Mana costs.

Recommendation

Finding:

The more legal formats, the better.

Recommendation:

Pay attention to rule changes and errata when buying cards. Banned cards generally don't sell for as much.

Oko, Thief of Crowns — 1 {G} {U}

Legendary Planeswalker — Oko

+2: Create a Food token.

+1: Target artifact or creature loses all abilities and becomes a green Elk creature with base power and toughness 3/3.

−5: Exchange control of target artifact or creature you control and target creature an opponent controls with power 3 or less.

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Recommendation

Finding:

The more high quality words in a card's text, the higher the price.

Recommendation:

Memorize some of the key high quality words and look for those in the card's text. Buy cards that have a lot of high quality words.

Future Work

- Improve model with data from Top 8 decks

- Predict most playable cards

- Revisit model after Ikoria prices have stabilized

Thank you!

An Abbreviated List of High Quality Magic Words

- 'obor'
- 'half'
- 'eternal'
- 'lands'
- "player's"
- "they're"
- 'needle'
- 'pithing'
- 'sheoldred'
- 'temple'
- 'enlightenment'
- 'mayor'
- 'avabruck'
- 'royal'
- 'zombies'

- 'porphyry'
- 'in play'
- 'nodes'
- 'gained'
- 'produced'
- 'dirtcowl'
- 'elf'
- 'adaptive'
- 'creates'
- 'warleader'
- 'hub'
- 'wanderwine'
- trostani'
- 'loyalty'
- 'everything'

- 'anywhere'
- 'progenitus'
- 'bands with other'
- 'legends'
- 'legendary'
- 'cathartic'
- 'reunion'
- 'extra'
- 'take'
- 'countered'
- 'revenge'
- 'titan'
- 'seaside'
- 'lyzolda'
- ''indestructible'