As Seen On TV

An Investigation of Movie Adaptation of Television Shows

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Agenda

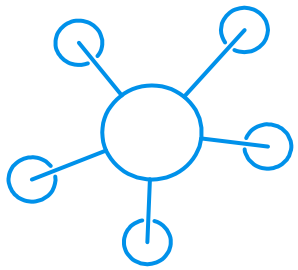
- Background
- Model Design
- Model Results
- Key Takeaways
- Next Steps

Background

why should we care?

“that means that in its life as a story, ***a real life situation*** *spawned a* ***book*** *which became a* ***movie*** *which became a* ***TV show*** *which could potentially become a* ***movie again****”*

Art is Malleable



art can be squeezed
into different medium

Why is this important?

Content Perspective

the market embraces transformation; adaptations turn the same ingredients into a different meal

Marketing Perspective

prior exposure to content can potentially reduce consumer acquisition cost

Successes


MOVIE


STAR TREK
INTO DARKNESS


HARRISON FORD
IS THE FUGITIVE

Not so much

So which one should we choose?

is there a way that we can predict which TV shows will make successful movies?

Model Design

how can we do this?

Supervised Learning

Linear Regression

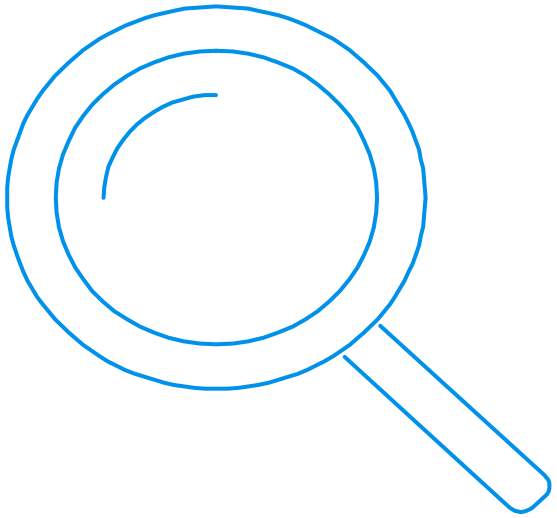
we can use what we already know to fit a model that tells us about relationships between features of the TV show and the success of the movie

The Data

Sample

approximately 65 movies that have been adapted from TV shows

only first release was considered where multiple releases



The Data

Box Office Mojo

movie web site with the most comprehensive box office database on the Internet

Domestic Gross

Genre

Release Date

Rating

Budget

IMDB

the world's most popular and authoritative source for movie, TV and celebrity content

Genre(s)

Awards Nominations

Wikipedia

A free encyclopedia built collaboratively using wiki software.

# of Episodes

# of Seasons

Episode length

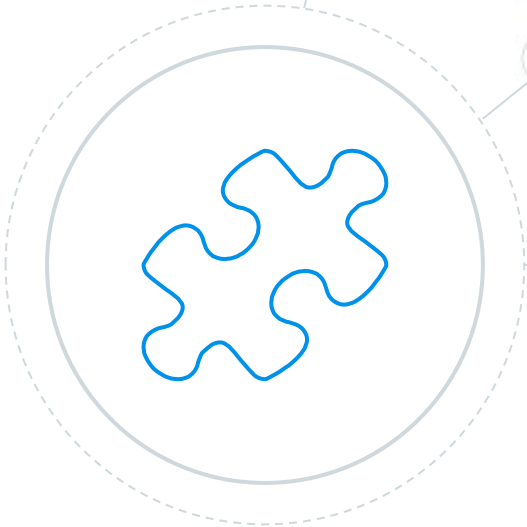
Network

How do we define success?

inflation adjusted
domestic box office gross

Which features should we consider?

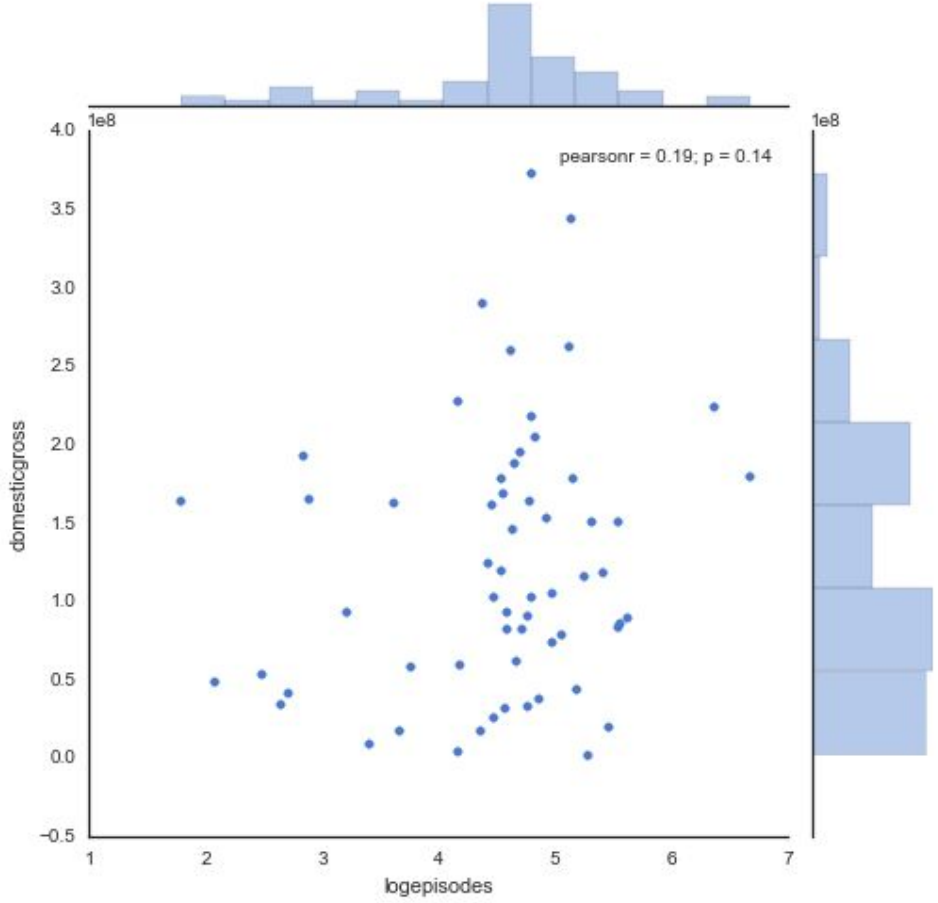
and how can we quantify them?



Consumer Exposure

Number of episodes

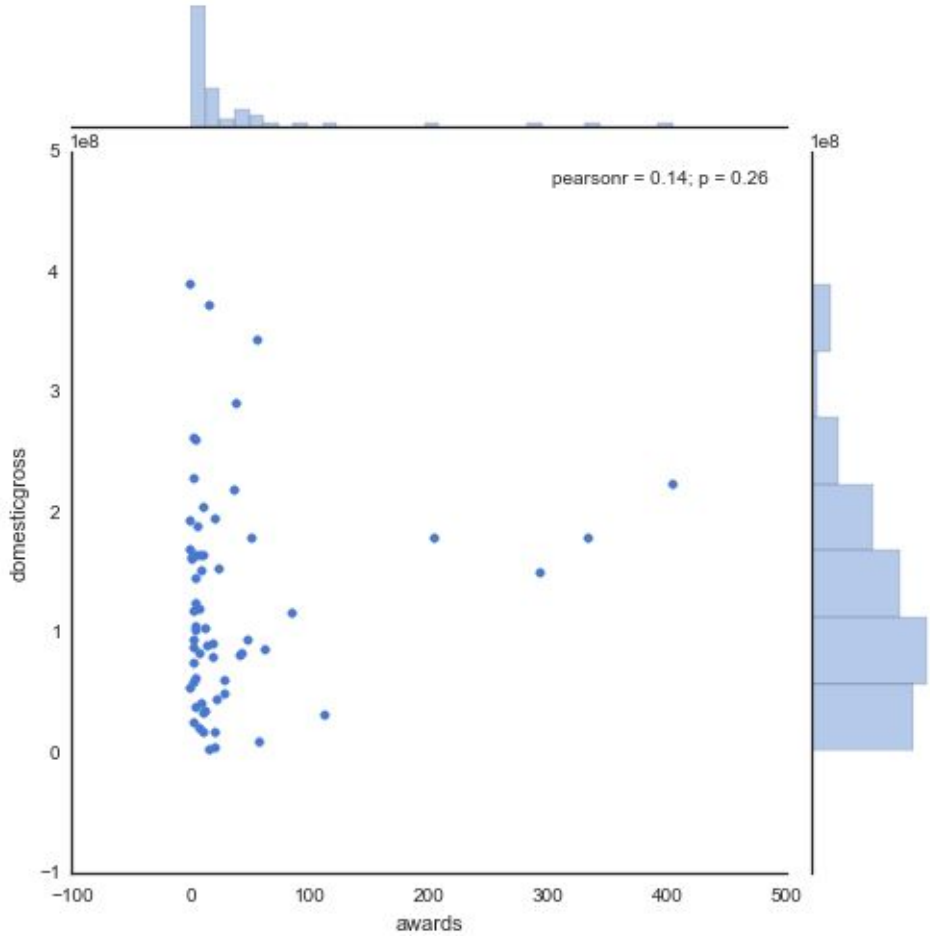
does more air time translate to more ticket sales?



Content Quality

Award Nominations

does higher quality content translate to more ticket sales?

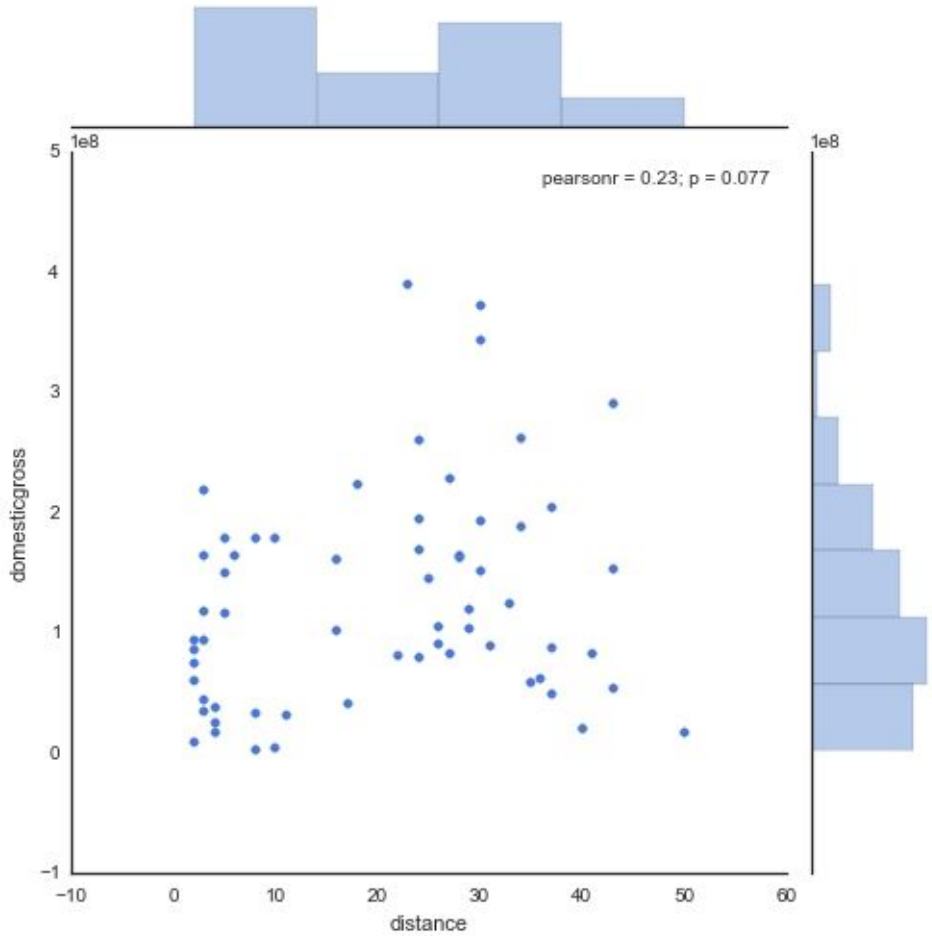


Motivation Vehicle

“Distance”

what feeling compels someone to see a movie more, nostalgia or hype/velocity?

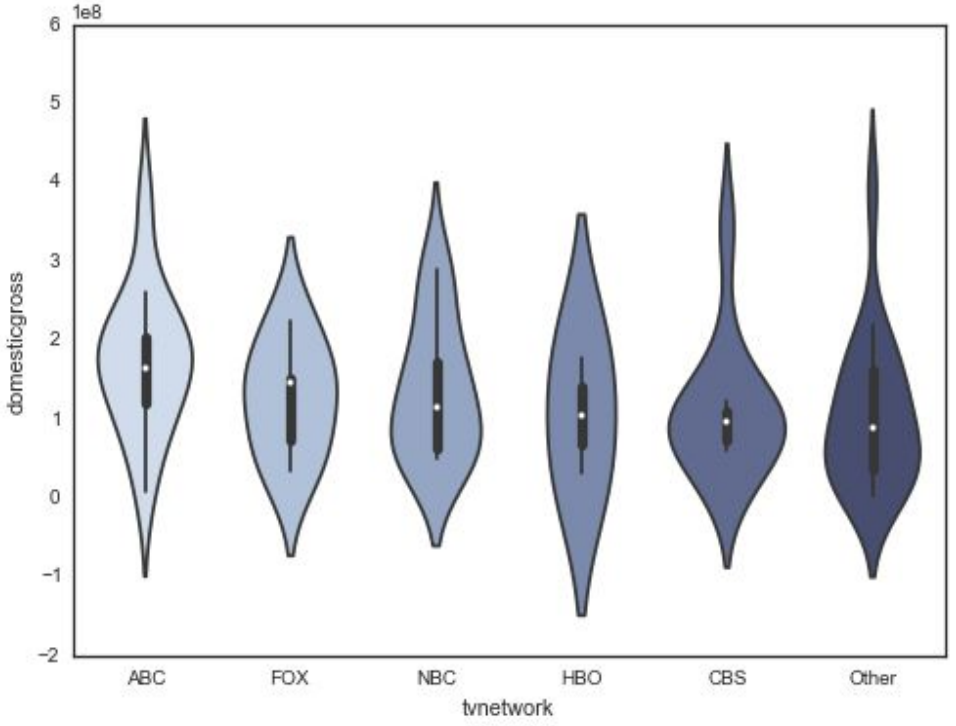
we can quantify this by looking at the time between the show premier and the movie release



Brand Perception

Network

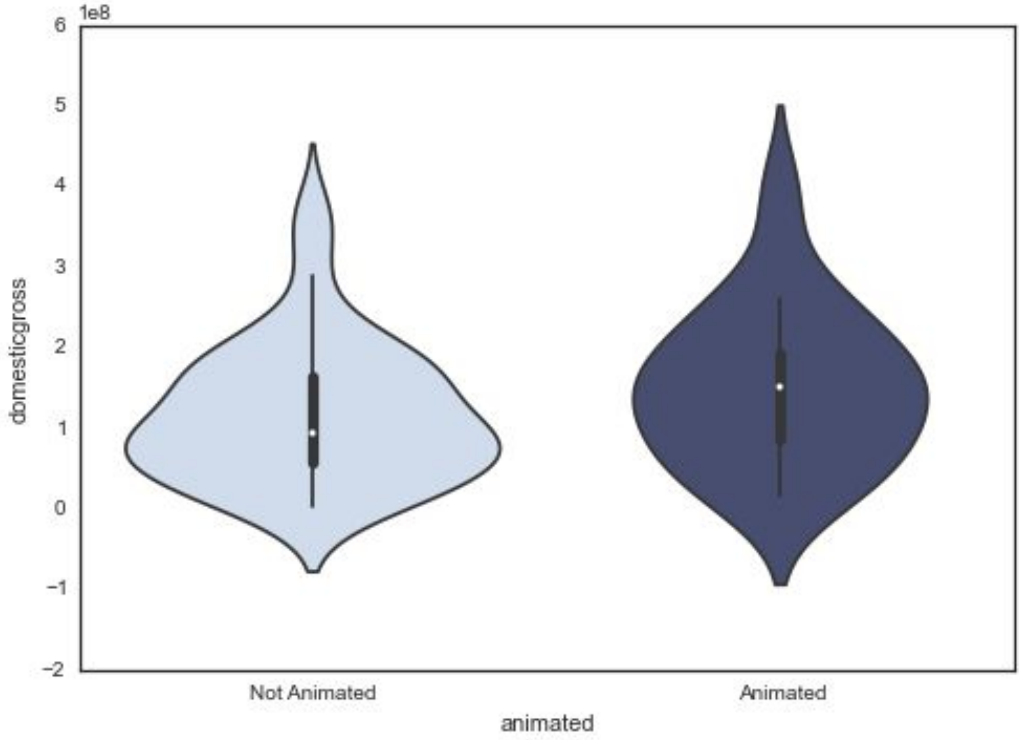
if consumers feel more network loyalty or have a certain perception network content, are they more or less likely to go see the movie?



Animated vs. Live Action

Animated Indicator

do animated show translate better to the big screen?



Model Results

so what happened?!

Model I

log(Episodes)
+ $13.59M

Awards
+ $0.19M

“Distance”
+ $1.31M

ABC
+ $75.24M

CBS
- $12.90M

FOX
+ $21.44M

HBO
+ $5.67M

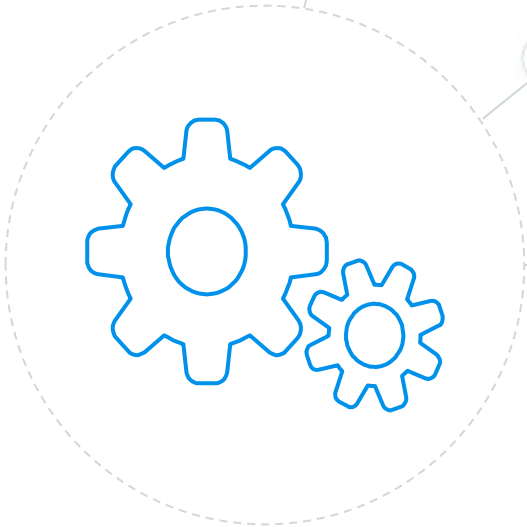
NBC
+ $23.09M

Animated
+ $33.12M

but is the model right?

not particularly, but this doesn't necessarily mean it's not useful

can we make it better?



lasso regularization to find the strongest features

Model II - Lasso Regularization

log(Episodes)
+ $13.85M

Awards
+ $0.19M

“Distance”
+ $1.24M

ABC
+ $64.26M

ABC only statistically significant feature

Key Takeaways

what do we know now?

1.

ABC Shows Are More Successful

all else equal you may want to go with the ABC show

2.

Other Key Features Show a Positive Relationship

the fit of the historic data implies this, but we don’t have enough evidence to say this isn’t random

3.

Movies are Complex

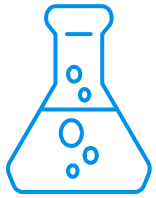
success depends on more factors than the characteristics of the underlying TV show

Next Steps

so now what?

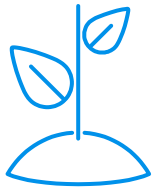
Further Analysis

Different Features



we can examine other features related to the movies themselves such as cast, budget, etc.

Regression Tree



relationship is likely non-linear so a different supervised learning approach may be more appropriate

Thanks!

any questions?