NIKE

What to do with the sneaker resell market?

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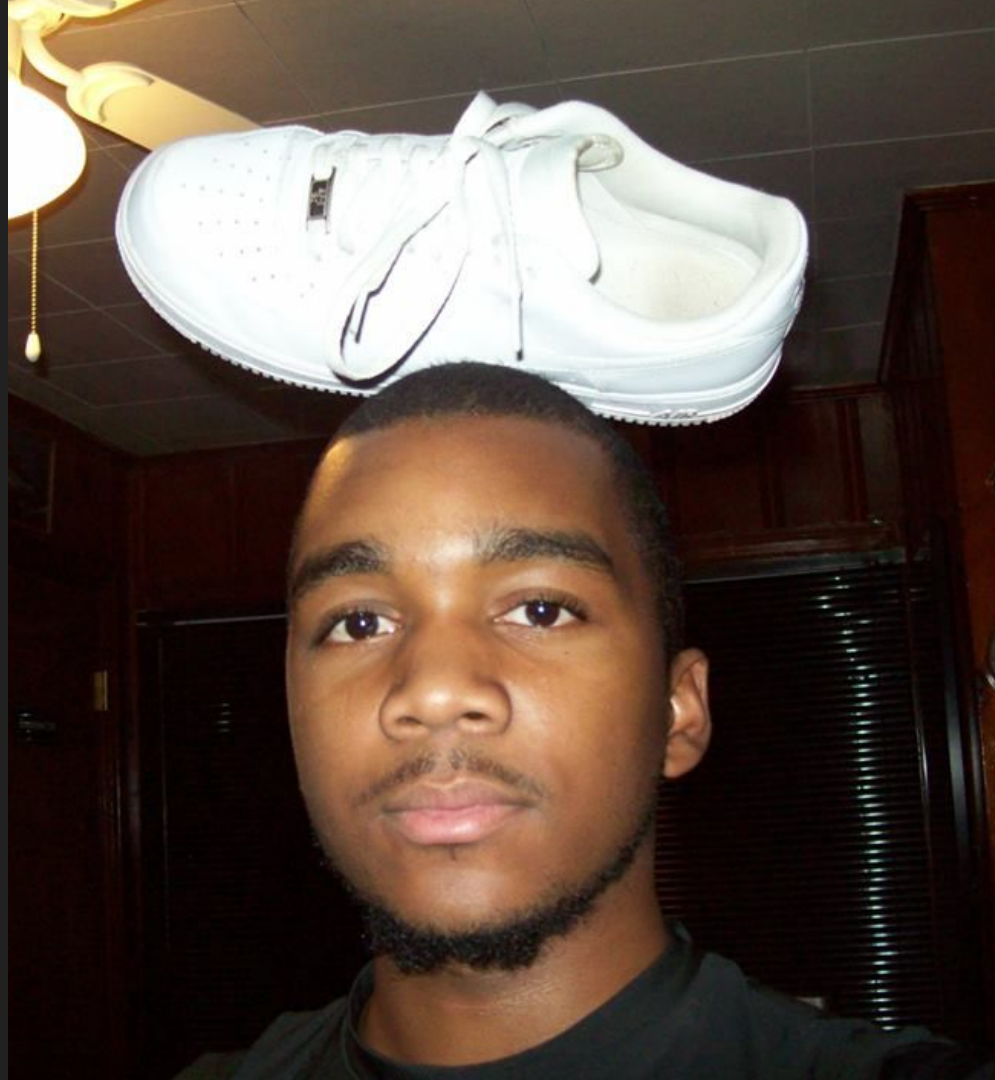


BACKGROUND KNOWLEDGE

- $1 Billion annual market in sneaker resale
- 4% of sneakers bought on drop date are immediately resold
- Nike spends upwards of $2.4 billion on marketing annually including a large social media budget
- Nike dominates the sneakerhead subculture with the intention of creating and maintaining brand loyalty

OBJECTIVES

- Is there a correlation between buzz created on Twitter and resale price on eBay?
- If so, can Nike use this information to predict when a shoe will be a successful drop?

DATA COLLECTION

1	2	3
Collect Twitter data to resemble public sentiment	*Collect resale values from eBay*	*Determine a statistic regression model*
• Tweepy/Python • Pre-buzz: 2 days before the drop • Post-buzz: 1 day after the drop • Keyword search	• Averaged twenty most recent sold listings • Size of shoe ranged	• Multiple linear regression • DV: Resale Price • IV: Pre buzz, Post buzz, Celebrity Endorsement, Original Price • Statistically significant correlation found

DATA ANALYSIS

- Celebrity endorsement was NOT statistically significant
- To make model better
  - Removed celebrity endorsement
  - Took log of pre buzz and post buzz

SUMMARY OUTPUT					
Regression Statistics					
Multiple R	0.959686437				
R Square	0.920998058				
Adjusted R Squa	0.861746601				
Standard Error	18.18506932				
Observations	8				
ANOVA					
	df	SS	MS	F	Significance F
Regression	3	15420.9404	5140.313468	15.54388886	0.011389563
Residual	4	1322.786984	330.6967461		
Total	7	16743.72739			
	Coefficients	Standard Error	t Stat	P-value	Lower 95%
Intercept	-47.30283951	68.65487267	-0.688994643	0.528709657	-237.9193247
Oringial Price	1.785235883	0.353501217	5.050154847	0.0072303	0.80375916
Log Pre Buzz	61.6865989	13.7451903	4.487867942	0.010923665	23.52383258
Log Post Buzz	-69.14684892	20.12529406	-3.435818067	0.026394583	-125.0236231

MAIN CHALLENGES

1 *Finding data*

- Deadstock per release
- Quantity sold on eBay
- Percentage of purchase shoes that are resold

2 *Rate Limitation*

- Number of requests could not exceed 180
- Combat rate limitation by grabbing tweets by region with geocode
- 429 error, 15 minute wait

3 *Date Limitation*

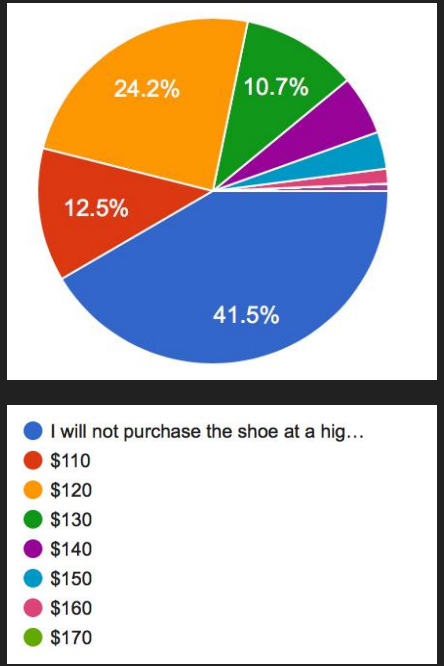
- Lack of time specificity with since and until parameters
- Pulling Tweet ID with desired created_at
- Historical data cannot be older than one week

INSIGHTS

- Resale Market
  - 98% of shoe resale market is Nike brand
  - Nike maintains and generates brand loyalty through exclusivity
- Re-releases
  - Limited deadstock during initial release
  - Re-released shoes have different colors, patterns, etc
  - Same price during re-release

RECOMMENDATIONS

- Do NOT increase price before original drop
- Use model to predict popularity of shoe
  - High buzz → popularity
  - Popularity → high resale price
  - High resale price → market for higher price
- Increase subsequent drop price by 10% of original price



SWOT ANALYSIS

- ***Strengths***
  - Simple model with data that encompasses many aspects of a shoe
- ***Weaknesses***
  - Sample size of shoe drops
  - Resell data from eBay
- ***Opportunities***
  - Collecting more data will lead to a more accurate model with the ability to include more parameters
- ***Threats***
  - Nike has a highly detailed model already in existence
  - Countless resources available online for sneakerheads

Questions?