Twitter and NBA Statistics

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Project Goals/Introduction

Explore relationship between NBA players' on court statistics

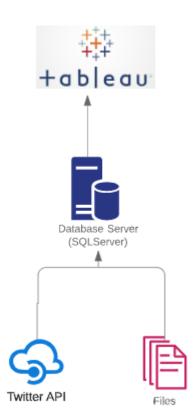
- Points per game
- Assists per game
- Number of minutes played

And their Twitter presence

- Number of followers
- Number of tweets
- Number of retweets and favorites

Project Implementation

- Aggregate multiple data sources
 - Twitter web scraping
 - Flat files
- Data modeling
- Final Tableau dashboards



Twitter Scraping

- Used existing python libraries: tweepy and request
- Data fields:
 - Account info: user name, bio, account created date, location
 - Follower count
 - Following count
 - Number of tweets
 - Average number of retweets, favorites

Twitter Scraping

1



@KingJames

EST. AKRON - ST.V/M Class of '0

189 Following 46.3M Follower

Matching display name

NBA-players

All the verified NBA and former NBA players who are on Twitter!



356 Members

1.9K Followers

Getting Twitter user names & data processing Matched "First name + Last name" format

356 members -> 139 players



Husband.Father.Champion.Artist. #Cl de la foutu pie"

S centerpiecedout.com ☐ Born Ju

541 Following 674.4K Followers

Matching username (processed)

Manual Google search



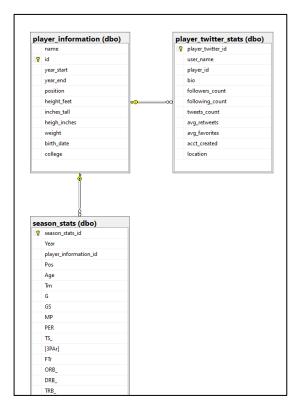
Twitter Scraping

[Status(_api=<tweepy.api.API object at 0x7fafa5fd8f90>, _json={'created_at': 'Wed Jun 03 19:48:00 +0000 2020', 'id': 1268268214581989377 , 'id str': '1268268214581989377', 'text': 'men who fought as well for this country. I asked him question about it and thank him all the time for his committee... https://t.co/UayPNAL3cQ', 'truncated': True, 'entities': {'hashtags': [], 'symbols': [], 'user mentions': [], ' urls': [{'url': 'https://t.co/UayPNAL3cQ', 'expanded_url': 'https://twitter.com/i/web/status/1268268214581989377', 'display_url': 'twitt er.com/i/web/status/1...', 'indices': [117, 140]}]}, 'source': 'Twitter for iP hone', 'in_reply_to_status_id': 1268268213013327872, 'in_reply_to_status_id_str': '1268268213013327872', 'in reply to user id': 2308 3404, 'in reply to user id str': '23083404', 'in reply to screen name': 'KingJames', 'user': {'id': 23083404, 'id str': '23083404', 'nam e': 'LeBron James', 'screen name': 'KingJames', 'location': 'Amongst La Familia!', 'description': "EST. AKRON - ST.V/M Class of '03 htt p://t.co/IneJylUd1m #IPROMISE", 'url': 'http://t.co/TuET0GeB2Z', 'entities': {'url': {'urls': [{'url': 'http://t.co/TuET0GeB2Z', 'expand ed url': 'http://LeBronJames.com', 'display url': 'LeBronJames.com', 'indices': [0, 22]}]}, 'description': {'urls': [{'url': 'http://t.c o/IneJylUd1m', 'expanded_url': 'http://LeBronJamesFamilyFoundation.org', 'display_url': 'LeBronJamesFamilyFoundation.org', 'indices': [3 4, 56]}]}}, 'protected': False, 'followers_count': 46353610, 'friends_count': 189, 'listed_count': 43248, 'created_at': 'Fri Mar 06 16:2 5:53 +0000 2009', 'favourites_count': 144, 'utc_offset': None, 'time_zone': None, 'geo_enabled': False, 'verified': True, 'statuses coun t': 7061, 'lang': None, 'contributors enabled': False, 'is translator': False, 'is translation enabled': True, 'profile background color ': '000000', 'profile background image url': 'http://abs.twimg.com/images/themes/theme1/bg.png', 'profile background image url https': ' https://abs.twimg.com/images/themes/theme1/bg.png', 'profile background tile': False, 'profile image url': 'http://pbs.twimg.com/profile _images/1010862750401253377/Rof4XuYC_normal.jpg', 'profile_image_url_https': 'https://pbs.twimg.com/profile_images/1010862750401253377/R of4XuYC_normal.jpg', 'profile_banner_url': 'https://pbs.twimg.com/profile_banners/23083404/1529843462', 'profile_link_color': 'FBAF41', 'profile sidebar border color': '000000', 'profile sidebar fill color': 'DDEEF6', 'profile text color': '333333', 'profile use backgroun d image': True, 'has extended profile': False, 'default profile': False, 'default profile image': False, 'following': False, 'follow reg uest_sent': False, 'notifications': False, 'translator_type': 'none'}, 'geo': None, 'coordinates': None, 'place': None, 'contributors': None, 'is quote status': False, 'retweet count': 13998, 'favorite count': 84807, 'favorited': False, 'retweeted': False, 'lang': 'en'}, created_at=datetime.datetime(2020, 6, 3, 19, 48), id=1268268214581989377, id_str='1268268214581989377', text='men who fought as well for this country. I asked him question about it and thank him all the time for his commiteme... https://t.co/UayPNAL3cQ', truncated=True, ent ities={'hashtags': [], 'symbols': [], 'user mentions': [], 'urls': [{'url': 'https://t.co/UayPNAL3cQ', 'expanded url': 'https://twitter. com/i/web/status/1268268214581989377', 'display_url': 'twitter.com/i/web/status/1...', 'indices': [117, 140]}]}, source='Twitter for iPhon e', source url='http://twitter.com/download/iphone', in reply to status id=1268268213013327872, in reply to status id str='1268268213013

ERD/ Database

Player information (e.g height, weight, college)

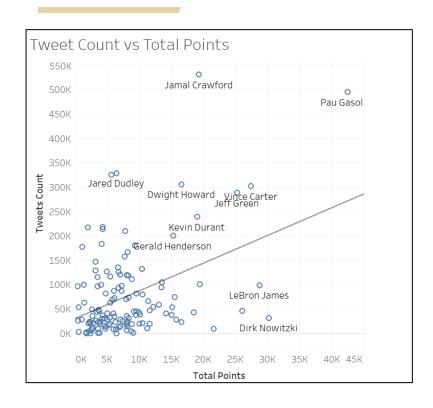
Season stats (e.g points, assists, steals, shooting %)

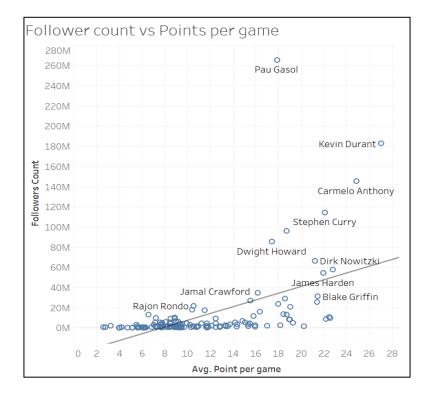


Twitter Stats (e.g followers, retweets,

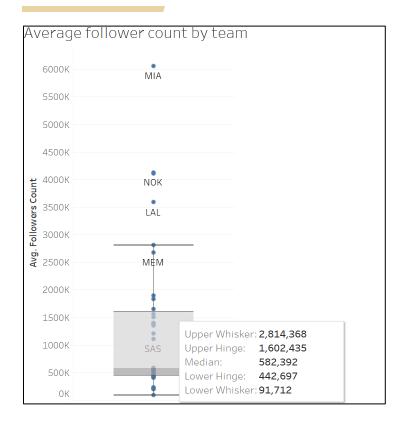
tweet count)

Example Visuals





Example Visuals





Thank You!

