

EDA

I have 1,127 dataset for each artist. I analyze some datasets to figure out important factors.

Import Packages

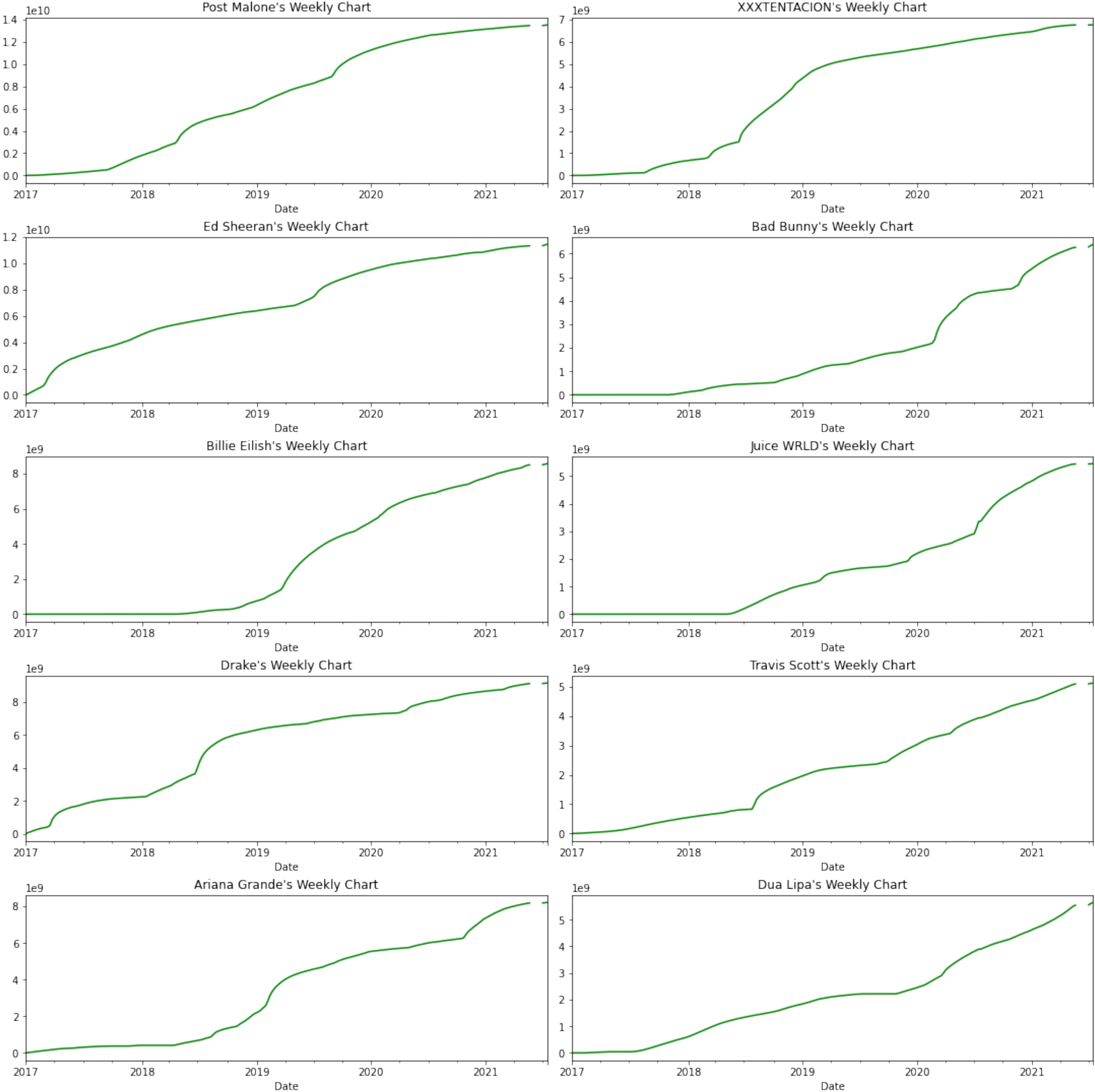
```
In [1]: import matplotlib.pyplot as plt
import pickle
from statsmodels.graphics.tsaplots import plot_acf, plot_pacf
import pandas as pd
```

Load Artists Data Dictionary

```
In [2]: with open('../data/final/artists_dict.pickle', 'rb') as artists:
artists_dict = pickle.load(artists)
artists.close()
```

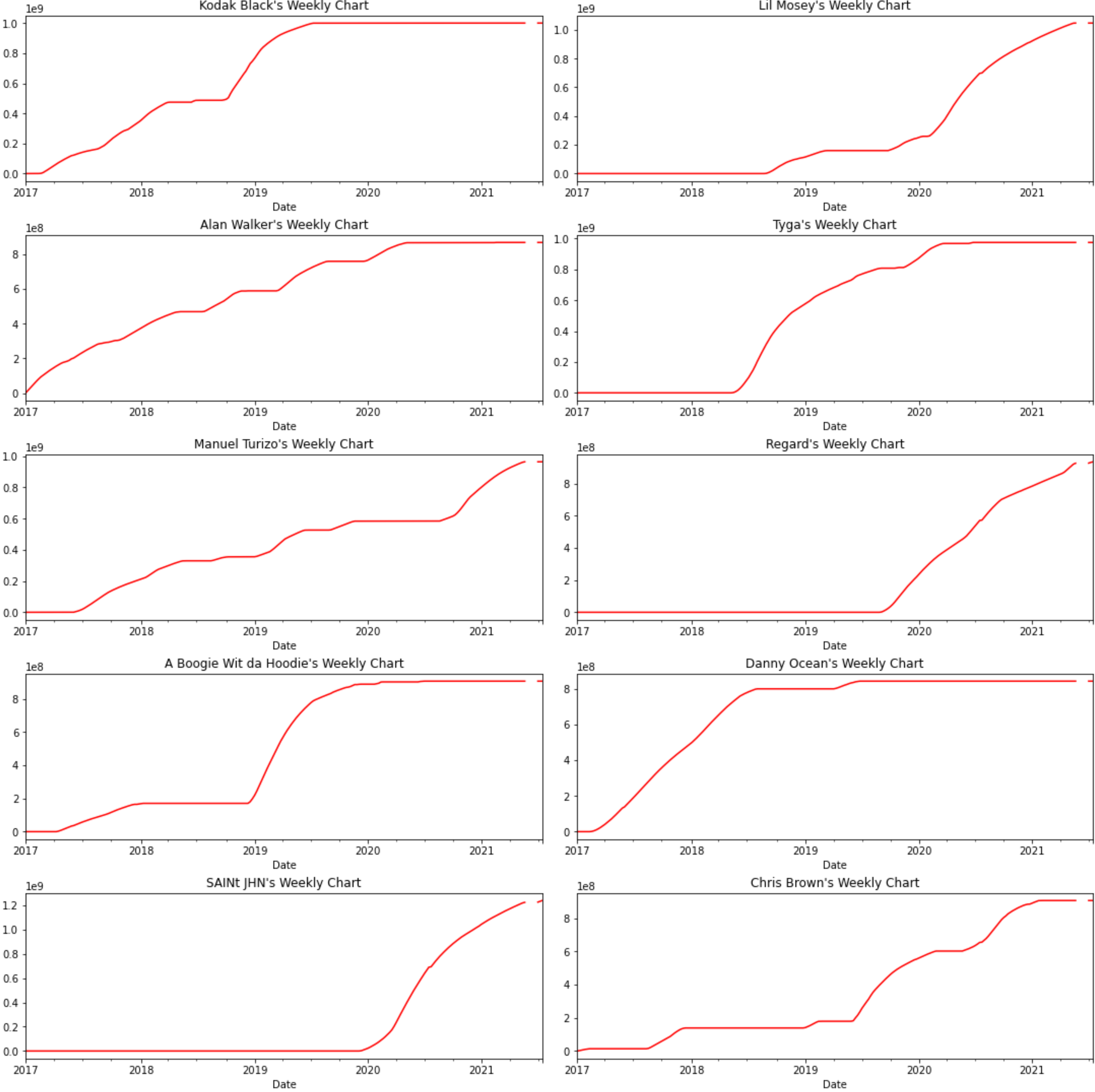
Time Series Plots - Top 10 Rank

```
In [3]: fig, ax = plt.subplots(nrows=5, ncols=2, figsize=(15, 15), constrained_layout=True)
for artist, i in zip(list(artists_dict.keys()), range(10)):
    r = i%5
    c = i//5
    artists_dict[artist].plot(ax=ax[r][c], title=f'{artist}'s Weekly Chart", color='g');
```



Time Series Plots - Low 10

```
In [4]: fig, ax = plt.subplots(nrows=5, ncols=2, figsize=(15, 15), constrained_layout=True)
for artist, i in zip(list(artists_dict.keys())[90:100], range(10)):
    r = i%5
    c = i//5
    artists_dict[artist].plot(ax=ax[r][c], title=f'{artist}'s Weekly Chart", color='r');
```



In []: