Viewership Analysis of Suits

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```
```{python}
import pandas as pd
import matplotlib.pyplot as plt
from pandas.plotting import register_matplotlib_converters
register_matplotlib_converters()
got_data = [
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```

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 {"Season": 8, "Episode": 6, "Title": "The Iron Throne", "Directed_by": "David Benioff & I
Now we convert the list of dictionaries into a DataFrame
got_df = pd.DataFrame(got_data)
Let's also make sure that the 'Original_air_date' column is a datetime type.
got_df['Original_air_date'] = pd.to_datetime(got_df['Original_air_date'])
Now 'got_df' is available as a variable containing all the episodes' data.
got_df.info() # Show the DataFrame info to confirm its structure
got_df.head() # Show the first few rows as a quick check
got_df.describe()[['US_viewers_millions']]
```

<class 'pandas.core.frame.DataFrame'> RangeIndex: 73 entries, 0 to 72 Data columns (total 7 columns):

#	Column	Non-Null Count	Dtype	
0	Season	73 non-null	int64	
1	Episode	73 non-null	int64	
2	Title	73 non-null	object	
3	Directed_by	73 non-null	object	
4	Written_by	73 non-null	object	
5	Original_air_date	73 non-null	datetime64[ns]	
6	US_viewers_millions	73 non-null	float64	
<pre>dtypes: datetime64[ns](1), float64(1), int64(2), object(3)</pre>				
memory usage: 4.1+ KB				

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	US_viewers_millions
count	73.000000
mean	6.447808
$\min$	2.200000
25%	3.900000
50%	6.640000
75%	7.820000
max	13.610000
$\operatorname{std}$	2.827372

## Game of Thrones - A Viewership Analysis Report

Game of Thrones is a fantasy drama television series created by David Benioff and D. B. Weiss for HBO. It is an adaptation of A Song of Ice and Fire, a series of fantasy novels by George R. R. Martin. Below is the viewership analysis spanning all eight seasons.

### **Summary of Viewership Statistics**

Game of Thrones has garnered significant viewership over the years, with ratings consistently increasing as the series progressed.

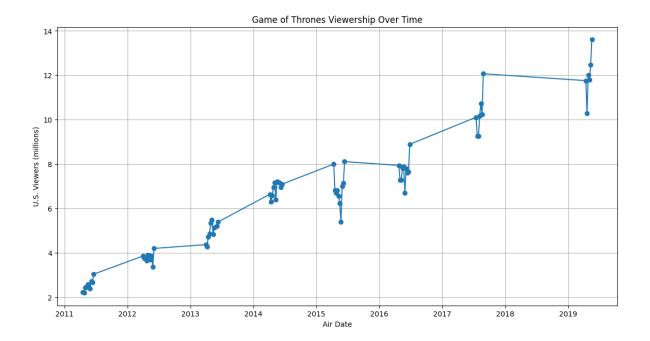
```
cot_df.describe()[['US_viewers_millions']]
```

	US_viewers_millions
count	73.000000
mean	6.447808
min	2.200000
25%	3.900000
50%	6.640000
75%	7.820000
max	13.610000
std	2.827372

### Viewership Trend Over Time

The graph below shows the trend of viewership across all seasons of Game of Thrones.

```
plt.figure(figsize=(14, 7))
plt.plot(got_df['Original_air_date'], got_df['US_viewers_millions'], marker='o')
plt.title('Game of Thrones Viewership Over Time')
plt.xlabel('Air Date')
plt.ylabel('U.S. Viewers (millions)')
plt.grid(True)
plt.show()
```

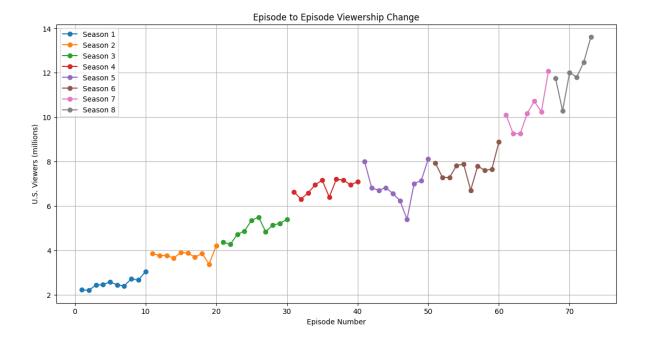


### Viewership by Episode

Let's look at how the viewership changed from episode to episode.

```
'``{python}
fig, ax = plt.subplots(figsize=(14, 7))
got_df['Episode_Number'] = range(1, len(got_df) + 1)
for season, group in got_df.groupby('Season'):
 group.plot(x='Episode_Number', y='US_viewers_millions', ax=ax, label=f'Season {season}',
```

```
plt.title('Episode to Episode Viewership Change')
plt.xlabel('Episode Number')
plt.ylabel('U.S. Viewers (millions)')
plt.legend()
plt.grid(True)
plt.show()
```



### Conclusion

The viewership for *Game of Thrones* has shown an upward trajectory, demonstrating the show's growing popularity over the years. It became a cultural icon and significantly impacted television and entertainment.

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