GDP and Social impact data analysis based on World Bank data

The UN data makes world development their main focus in order to save as an indicator to rate the performance of all organizations. The indicators are grouped into 1,200 to measure the activities and the rate of the performance of each organization's involvement in social and economic development. The performance should be rated globally the indicator will be able to differentiate between each organization in regards to which organizations have high social and economic development and the ones with low economic and social development in regards to their GDP.
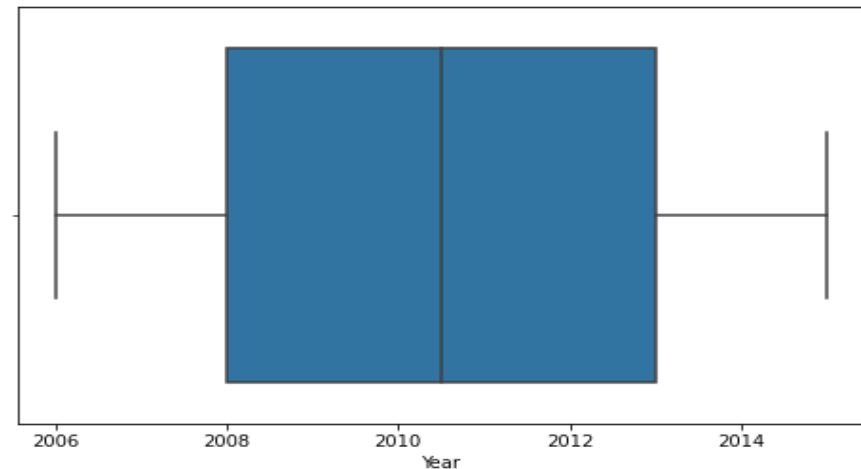
I selected 14 countries over 10 years to understand their GDP and social impact rating using python libraries such as NumPy, pandas, and matplotlib for the analysis.

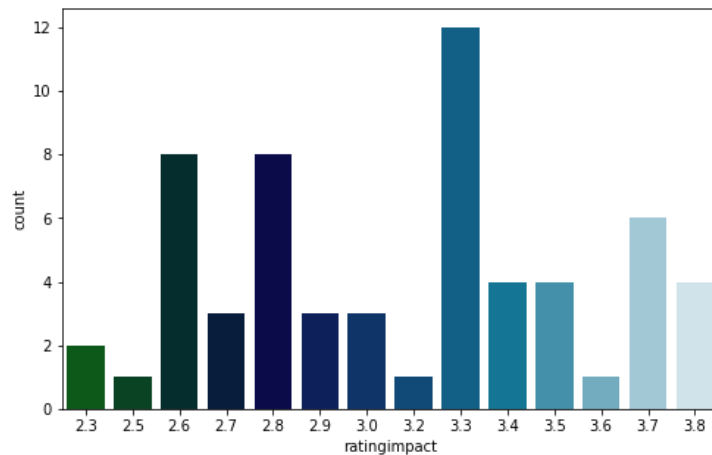The following insights and observations were observed from the dataset.

```
df.head()
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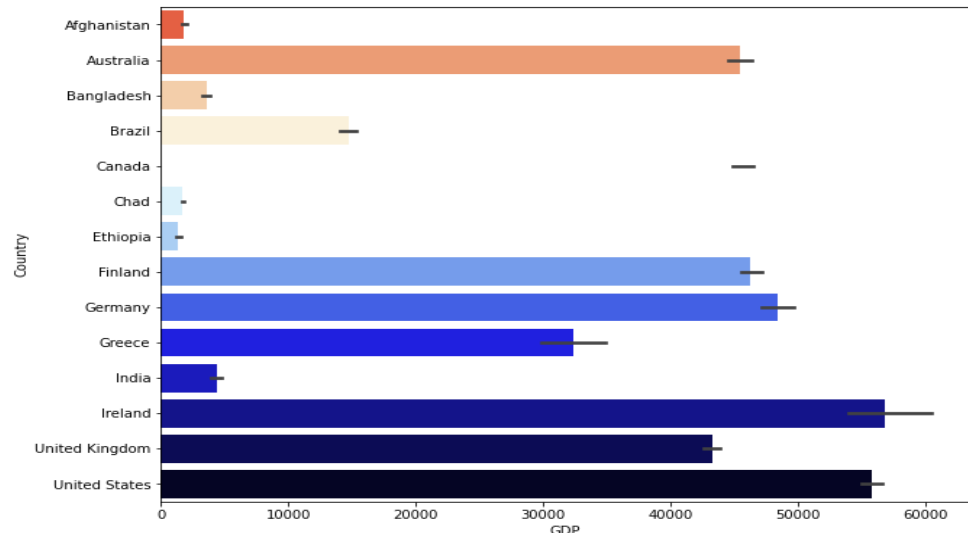|	Country	Year	GDP	ratingimpact
0	Afghanistan	2015	2068.265904	2.6
1	Afghanistan	2014	2102.384604	2.6
2	Afghanistan	2013	2116.465258	2.6
3	Afghanistan	2012	2075.491614	2.7
4	Afghanistan	2011	1904.559926	2.7

I checked through the dataset here to see the top 5 records in the Data frame using the head() in pandas. They captured the country, Year, the two indicators' values using GDP and social rating impact From the world data.

I plotted the box plot from matplotlib library to check details about the and year, and the result shows a mean of 2010.500000, std 2.882595, min 2006.000000, max 2015.000000

The rating of the countries based on their social impact was captured Using a bar plot(), the data shows that most countries' social impact rating over the past 10 years huge ratings of 3.3, 2.6, 2.8, and 3.7 respectively. This shows that the rating and performance of most countries have improved through their developmental projects.

The bar chart also shows that country **Ireland** has the highest GDP of 55000 values followed by the United States, Germany, Finland, Australia, United Kingdom, countries like Chad, Ethopia, India, Bangladesh have low GDP values.

`df.corr()`

	Year	GDP	ratingimpact
Year	1.000000	0.016663	0.170178
GDP	0.016663	1.000000	0.106705
ratingimpact	0.170178	0.106705	1.000000

	Year	GDP	ratingimpact
count	140.000000	140.000000	60.000000
mean	2010.500000	28679.004913	3.125000
std	2.882595	21951.873980	0.428092
min	2006.000000	929.694443	2.300000
25%	2008.000000	3443.362313	2.800000
50%	2010.500000	39606.375905	3.300000
75%	2013.000000	46764.930615	3.425000
max	2015.000000	71508.733840	3.800000

The clear relationship between the indicators concerned over the years and countries shows the high correlation between years recorded over the impact ratings. This shows the occurrence in the countries over the years has a huge effort to the social impact ratings in the countries.

The describe() helps to get the statistical value such as mean, count, std, min, max and 25%, 50%, 75% of the distribution of the indicators.