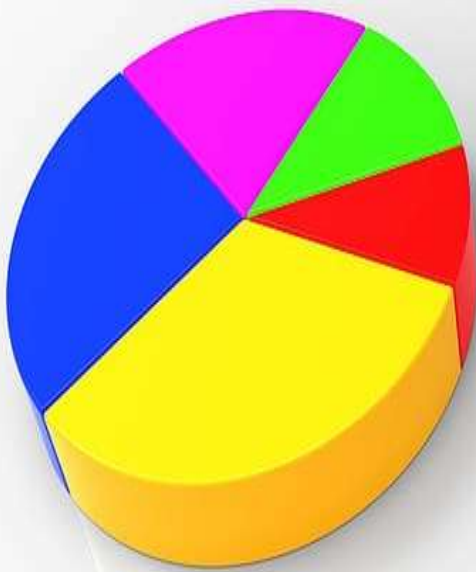




Web Scrapping and Analysis




Name- Rahul Gohri

045044

PGDM(BDA)04

https://github.com/Rahul-045044/045044_Python_Project.git



Objective:

The objective of this managerial report is to analyze the ease of doing business rankings for various countries from 2006 to 2020. The report aims to identify trends, patterns of the countries over the years. By examining the overall trend, country-specific insights and classification patterns, the report will provide actionable recommendations to enhance our organization's business environment and inform strategic decision-making. The report will provide insights into the ease of doing business rankings for various countries, which can serve as a benchmark for our organization's business environment. By analysing the trends and patterns in these rankings, we can identify areas where organization can expand their business.

General Description of Data:

	Jurisdiction	Classification	2020	2019	2018	2017	2016	2015	2014	\
0		NaN	[77]	[78]	[79]	[80]	[81]	[82]	[83]	
1	New Zealand	Very Easy	1	1	1	1	2	2	3	
2	Singapore	Very Easy	2	2	2	2	1	1	1	
3	Hong Kong	Very Easy	3	4	5	4	5	3	2	
4	Denmark	Very Easy	4	3	3	3	3	4	5	
..	
186	Libya	Below Average	186	186	185	188	188	188	187	
187	Yemen	Below Average	187	187	186	179	170	137	133	
188	Venezuela	Below Average	188	188	188	187	186	182	181	
189	Eritrea	Below Average	189	189	189	189	189	189	184	
190	Somalia	Below Average	190	190	190	190	-	-	-	
	2013	2012	2011	2010	2009	2008	2007	2006		
0	[84]	[85]	[86]	[87]	[88]	[89]	[90]	[91]		
1	3	3	3	2	2	2	2	1		
2	1	1	1	1	1	1	1	2		
3	2	2	2	3	4	4	5	7		
4	5	5	6	6	5	5	7	8		
..		
186	-	-	-	-	-	-	-	-		
187	118	99	105	99	98	113	98	90		
188	180	177	172	177	174	172	164	120		
189	182	180	180	175	173	171	170	137		
190	-	-	-	-	-	-	-	-		
[191 rows x 17 columns]										

The Dataframe presents a comprehensive overview of ranking of countries on the basis of ease of doing business over the years from 2006 to 2020. It includes detailed information about name of the country, classification, and ranking over the years.

Column Description:

Jurisdiction: It contains the name of the countries.

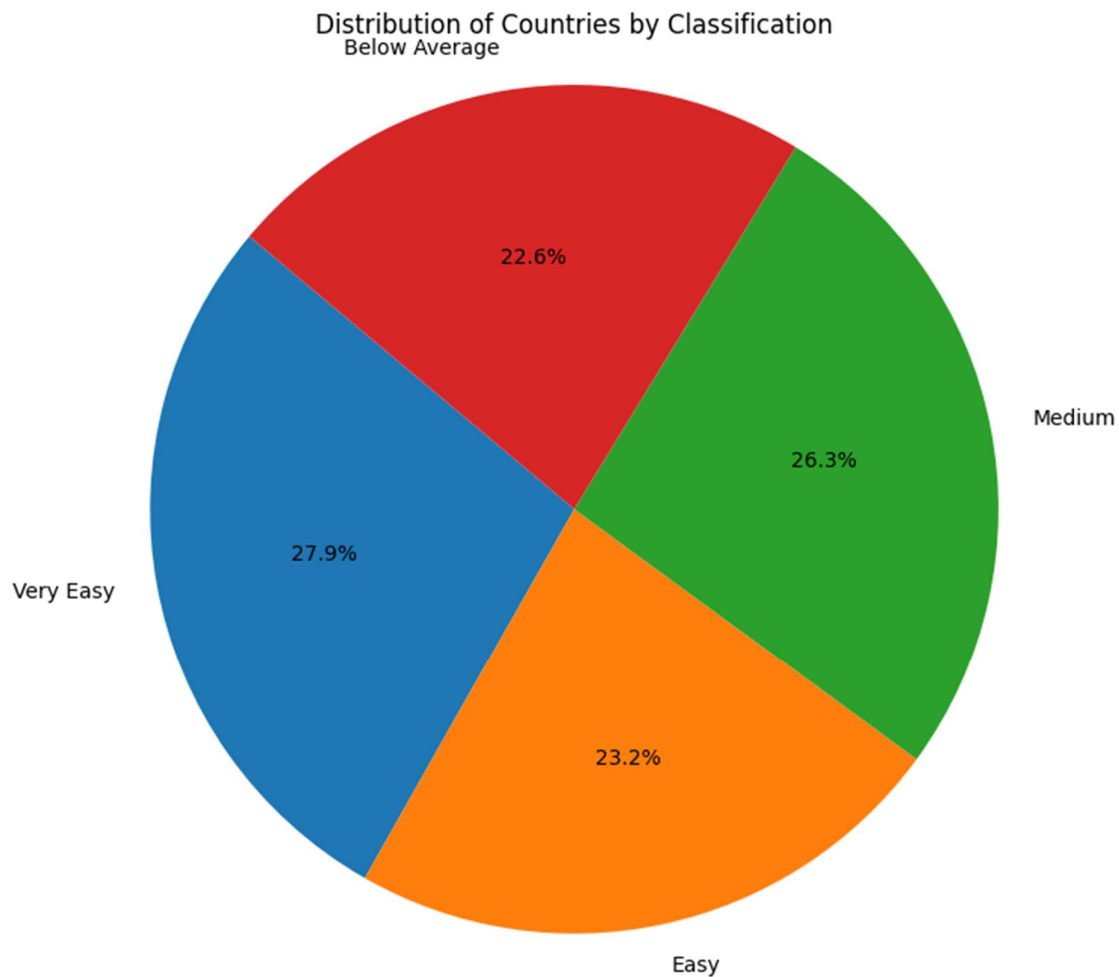
Classification: It provides classification to countries on ease of doing business as “Very Easy”, “Easy”, “Medium”, “Below Average”.

2020-2006: These are the years under which the ranking is given for each country for that particular year.

Analysis:

1. Percentage of countries under each category of classification

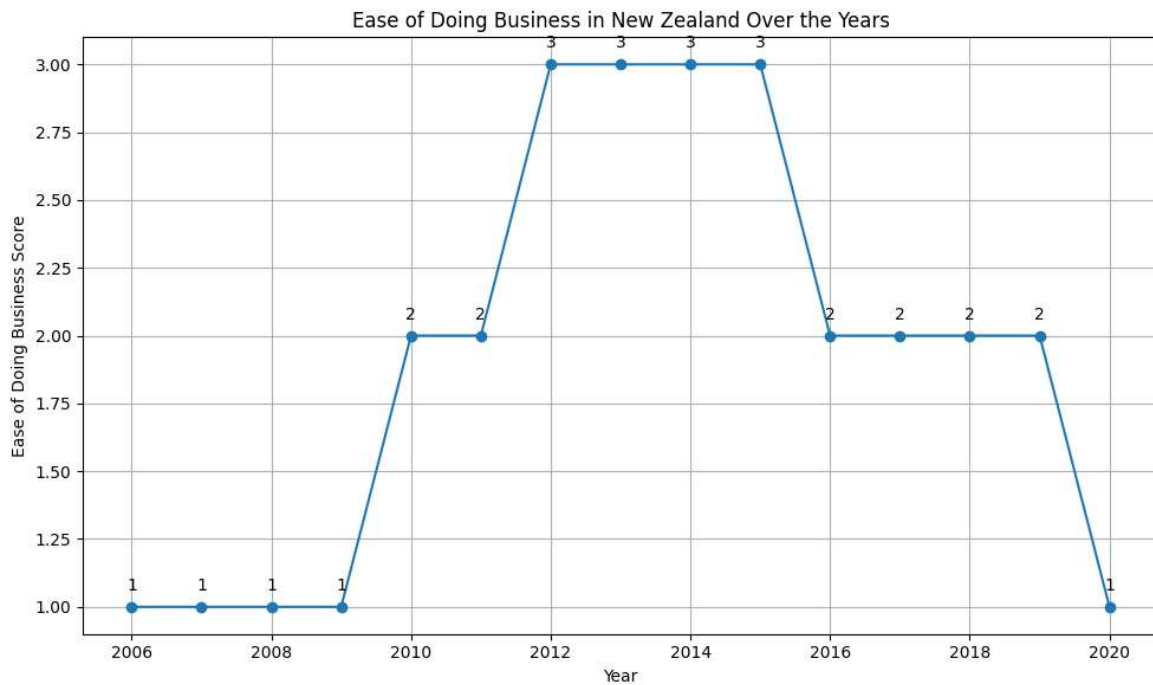
Pie chart: It tells about the percentage of countries in each of the four categories in classification column



The pie chart tells that 27.9% of countries are categorized as Very easy, 23.2% as Easy, 26.3% as Medium and 22.6% as Below average for ease of doing business

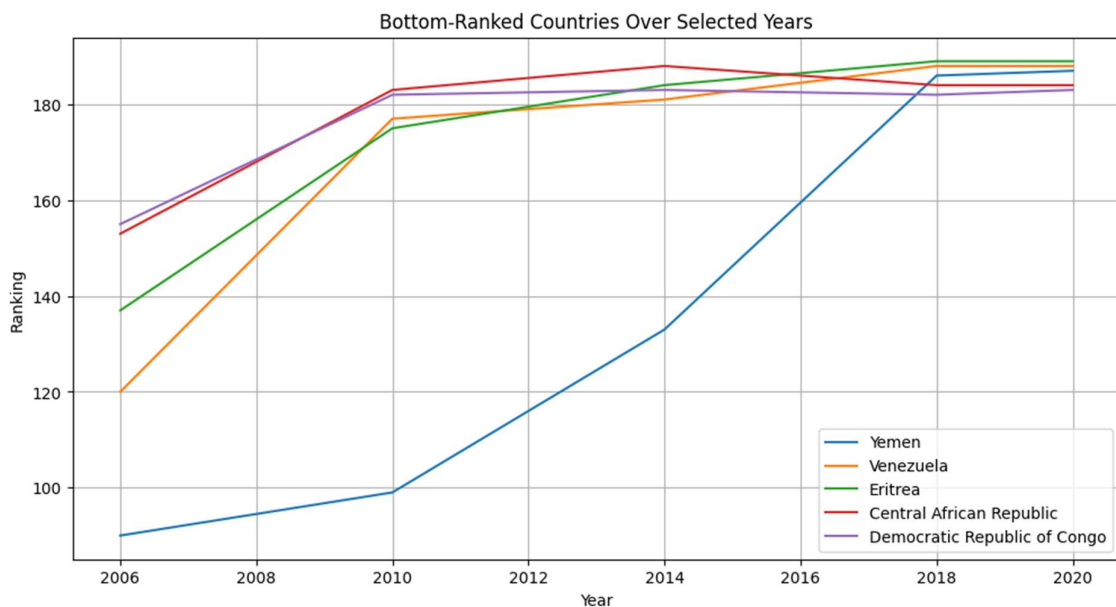
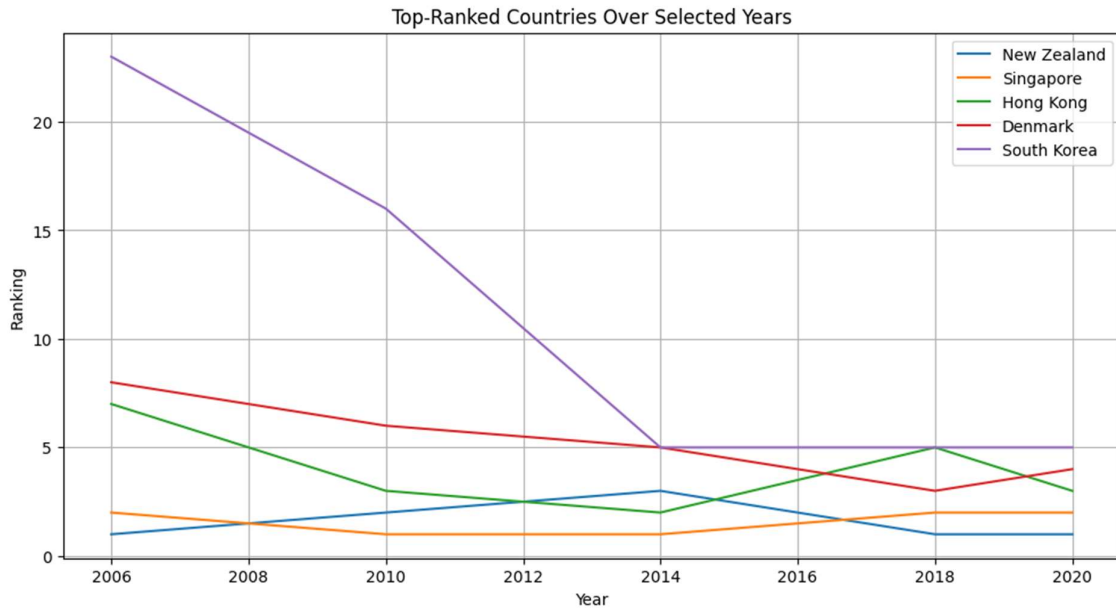
2. Performance of New Zealand (Rank 1 of 2020) over the years from 2006 to 2020

Line Chart:



- Line charts are particularly useful for illustrating trends, patterns, and fluctuations in data. They can show how a variable change over time, identify any significant increases or decreases, and highlight any correlations or relationships between variables.
- The above Line chart shows the Ranking of Ease of doing business in New Zealand which ranked one in the year 2020. It shows that New Zealand was in top 3 consistently from 2006 to 2020 which shows that New Zealand is the best country to open a new business or to expand the business.

- Analysis of Top 5 ranked countries and bottom 5 ranked countries of 2020 over the years from 2006 to 2020



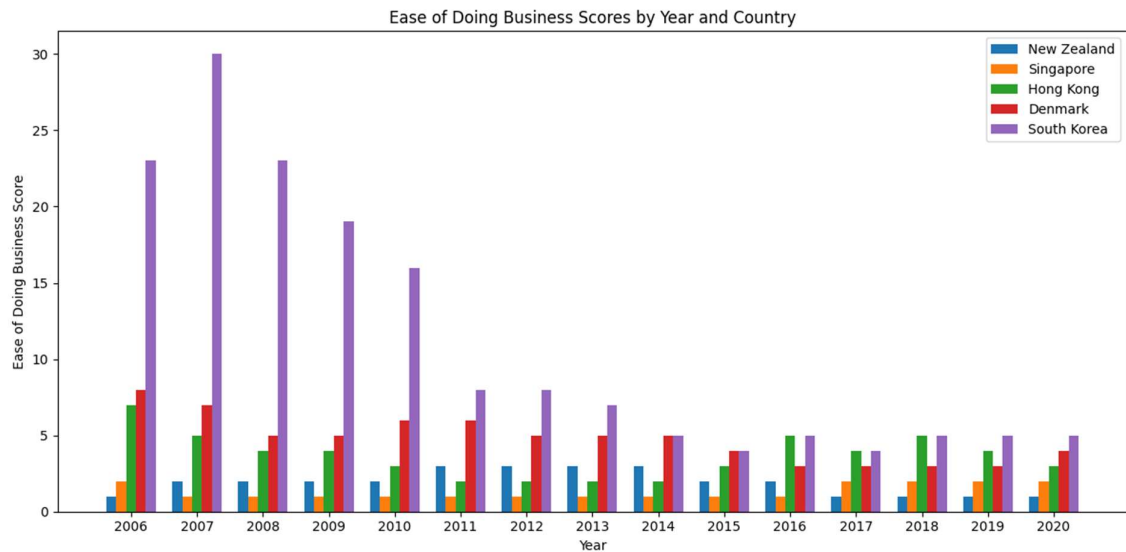
The above charts show how the countries ranking move over the period, for the analysis I took top 5 countries and bottom 5 countries overall and plotted them on the Line chart.

"Top-Ranked Countries Over Selected Years": This chart shows the rankings of the top-ranked countries (New Zealand, Singapore, Hong Kong, Denmark, South Korea) over the selected years (2006, 2010, 2014, 2018, 2020). This chart shows how the countries ranking are moving over the years and especially the ranking of South Korea which improved consistently and maintained its spot as top 5 from the year 2014.

"Bottom-Ranked Countries Over Selected Years": This chart shows the rankings of the bottom-ranked countries (Yemen, Venezuela, Eritrea, Central African Republic, Democratic Republic of Congo) over the selected years (2006, 2010, 2014, 2018, 2020). The data shows that countries ranks are increasing over time and especially Yemen whose rank was under 100 in 2006 is now in 2020 has more than 180 rank which shows that the conditions for doing business are worsening over time.

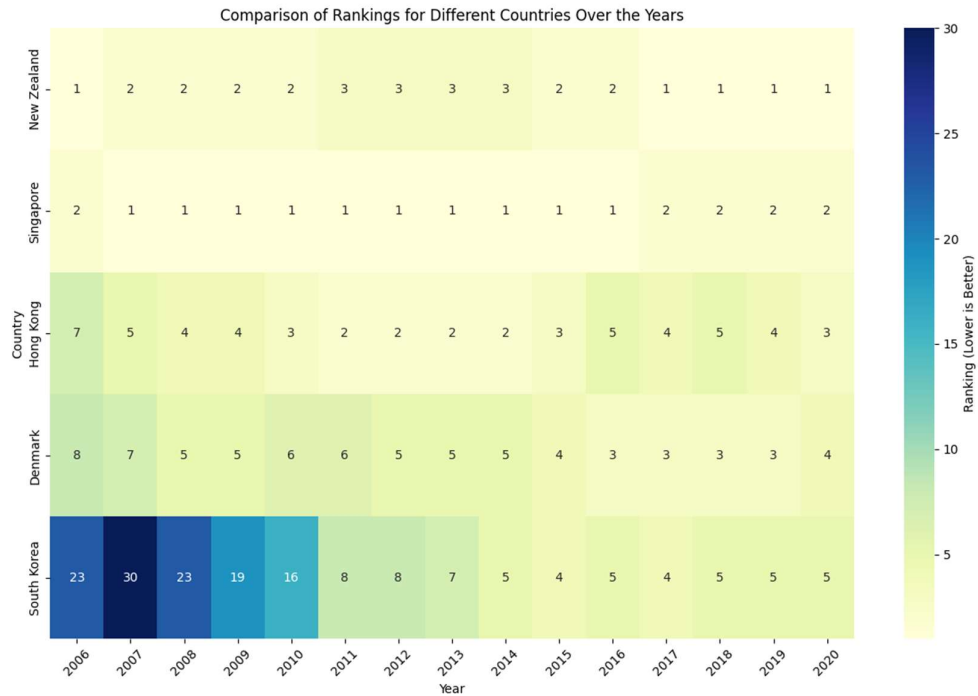
4.Comparision of performance of top 5 countries of 2020 over the years from 2006 to 2020.

Grouped Bar Chart:



The above chart shows the rank of top 5 countries over the years. A significant change can be seen in the South Korea whose rank moved from above 20 to 5. While all the other countries maintaining their spot in top 5 countries. This tells us that any company can operate in these 5 countries easily.

The same analysis like above is done using a heatmap to get a clear picture of ranks.



5. Below are the mean, median, mode, standard deviation, and variance of the data of ease of doing business ranking from 2006 to 2020 of top 5 economies of the world in 2023

United States:

Mean = 5.00

Median = 4.0

Mode = 3

Standard Deviation = 1.79

Variance = 3.20

China:

Mean = 80.20

Median = 84.0

Mode = 91

Standard Deviation = 17.45

Variance = 304.56

Japan:

Mean = 23.20

Median = 24.0

Mode = 34

Standard Deviation = 9.52

Variance = 90.69

Germany:

Mean = 20.27

Median = 20.0

Mode = 20

Standard Deviation = 3.13

Variance = 9.80

India:

Mean = 119.93

Median = 130.0

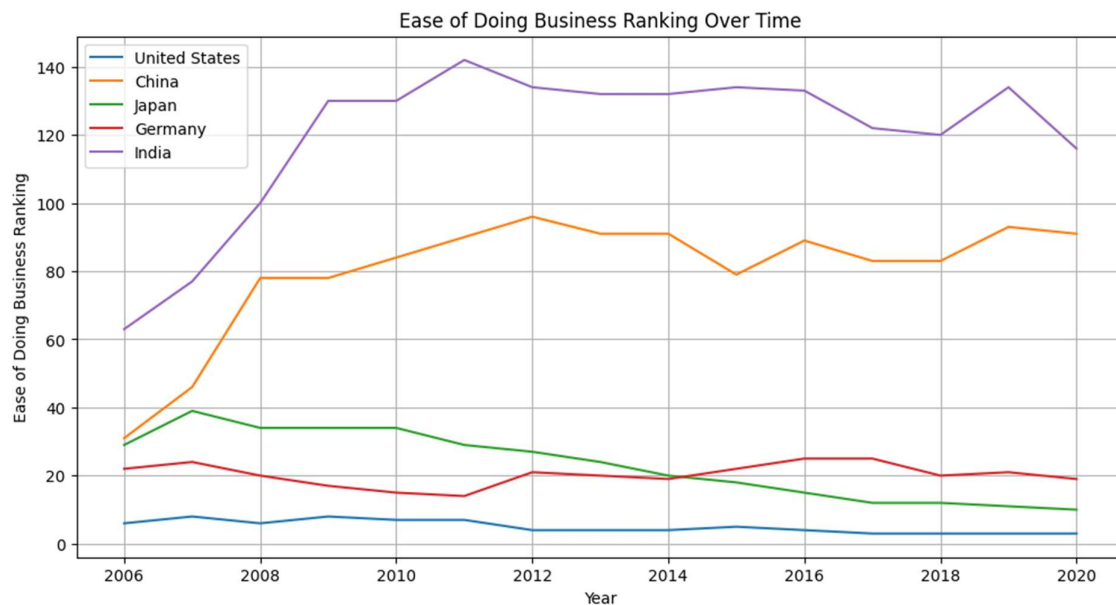
Mode = 134

Standard Deviation = 21.98

Variance = 483.13

The above data of mean, median, mode, standard deviation and variance shows that United States is the best place to do business in out of the top 5 economies of the world with mean rank of 5, median of 4 and mode of 3 rank followed by Germany, Japan, China and then India.

6. Trend Analysis to check the trend of ranking over period of 2006 to 2020 of top 5 economies of 2023

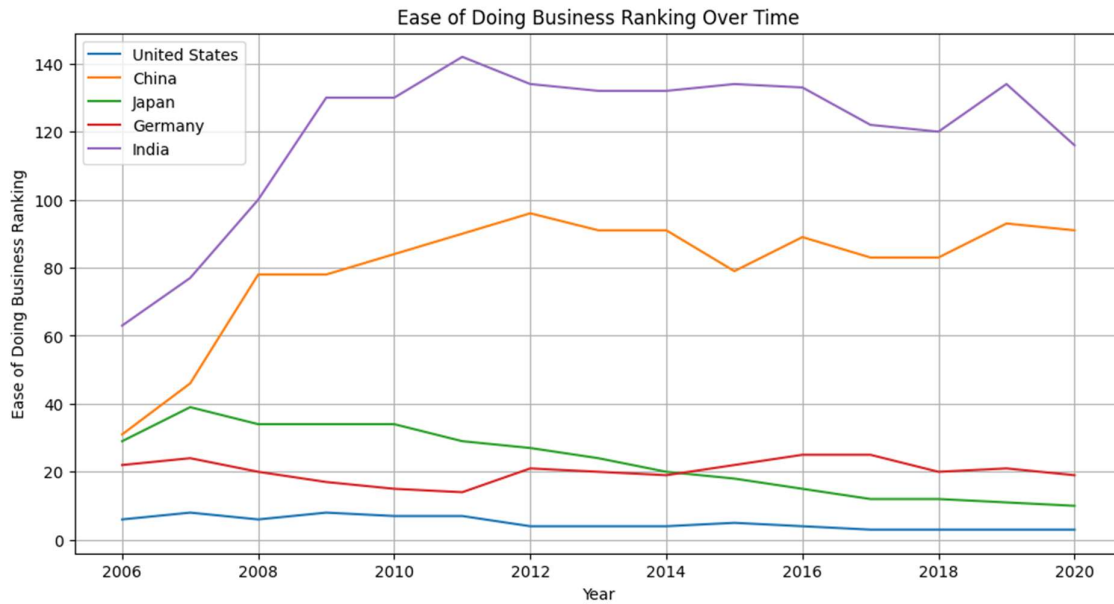


The above chart shows the performance of top 5 economies of 2023 on ease of doing business ranking from 2006 to 2020.

After analysing the chart we can say that United States is maintaining its position over time while Japan is improving its ranking and Germany is also on the same path. However, China and India are struggling to maintain their ranking over time and a huge increase can be seen in their ranking which shows that they are losing their status as ease of doing business.

Managerial Implications

Organisations can use this data to understand which country is best for their expansion or for starting a new business. They can compare different countries to see the pattern of fluctuation in countries ranking to find the country for their expansion. For example, from the below chart they can check which country is best fit for their investment while also considering other factors for setting up a business.



Organisations can use this data to understand how a particular country is performing over a period of time to check for expansion or for starting a new business.

