

The background of the slide features a high-angle photograph of the New York City skyline, centered on the Empire State Building. Overlaid on this image are several semi-transparent blue and light blue graphical elements. These include a network of thin lines connecting small circular nodes, a series of vertical candlestick charts representing stock market data, and a single tall, thin antenna tower on the right side.

# NEW YORK STOCK EXCHANGE

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# Contents

- **Task 1 - Data Analytics for NYSE Data**

What is the average revenue of companies for different CIGS Sectors?

- Average of Total Revenue
- Descriptive Analytics

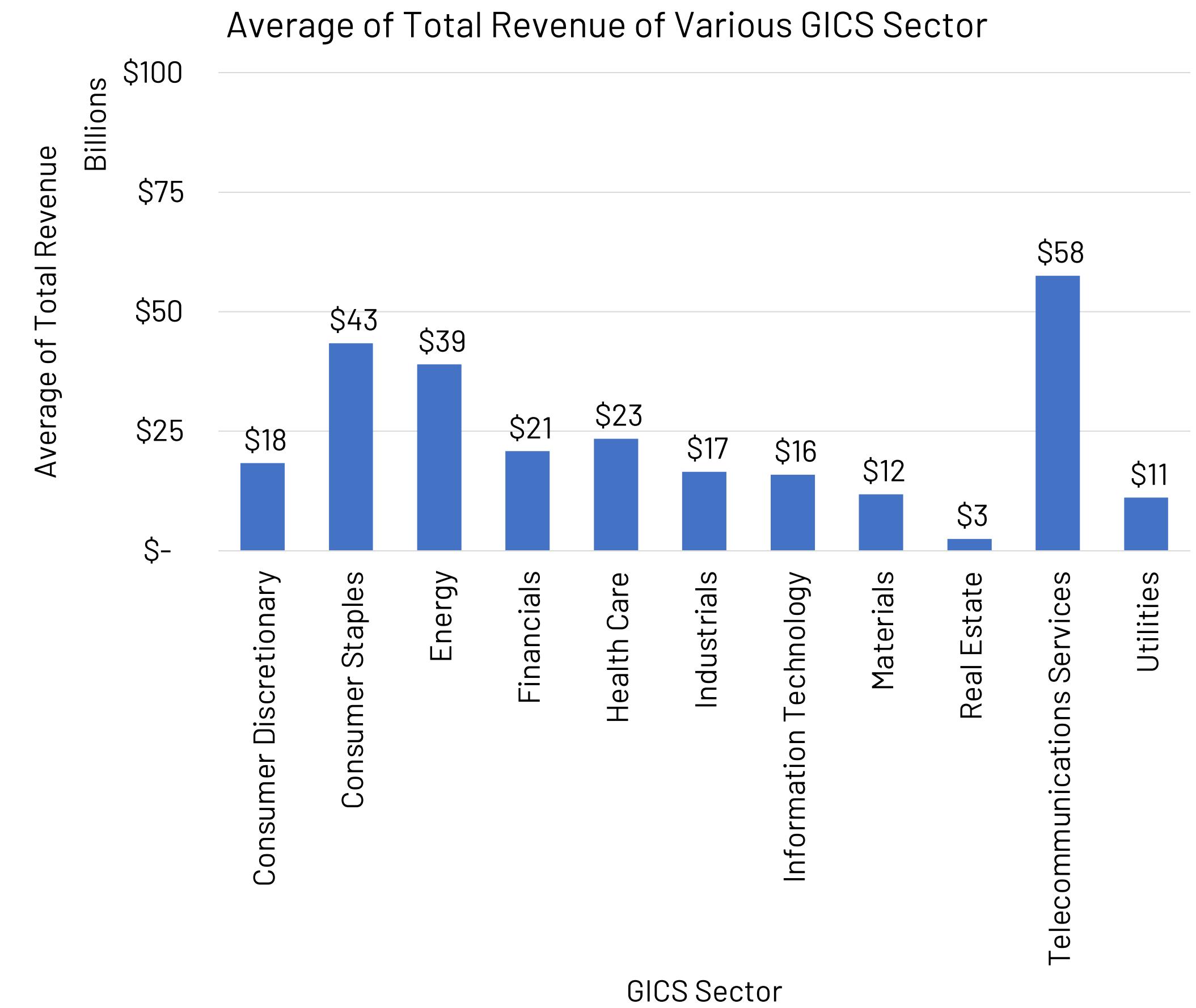
- **Task 2 - Profit and Loss Statement**

- **Task 3 - Financial Forecasting Model**

# Task 1 – What is the average revenue of companies for different GICS sectors?

## Average of Total Revenue

- The average revenue for different GICS sectors is illustrated.
- The Telecommunications Services has the highest average around \$58 bn.
- The Consumer Staples and Energy sectors have the highest average revenue as by \$43 and \$39 bn.
- The lowest revenue is related to Real Estate by \$3 bn.
- This however does not show the rate of increase and decrease in the revenue of each sector.
- The mean total revenue for companies categorized under Telecommunications Services (\$58 bn) was higher compared to the mean total revenue for all Consumer Staples (\$43 bn) and Energy (\$39 bn).
- Correspondingly, it looks like companies in the Telecommunications Services have a higher total revenue on average than all industries categorized under other categories.

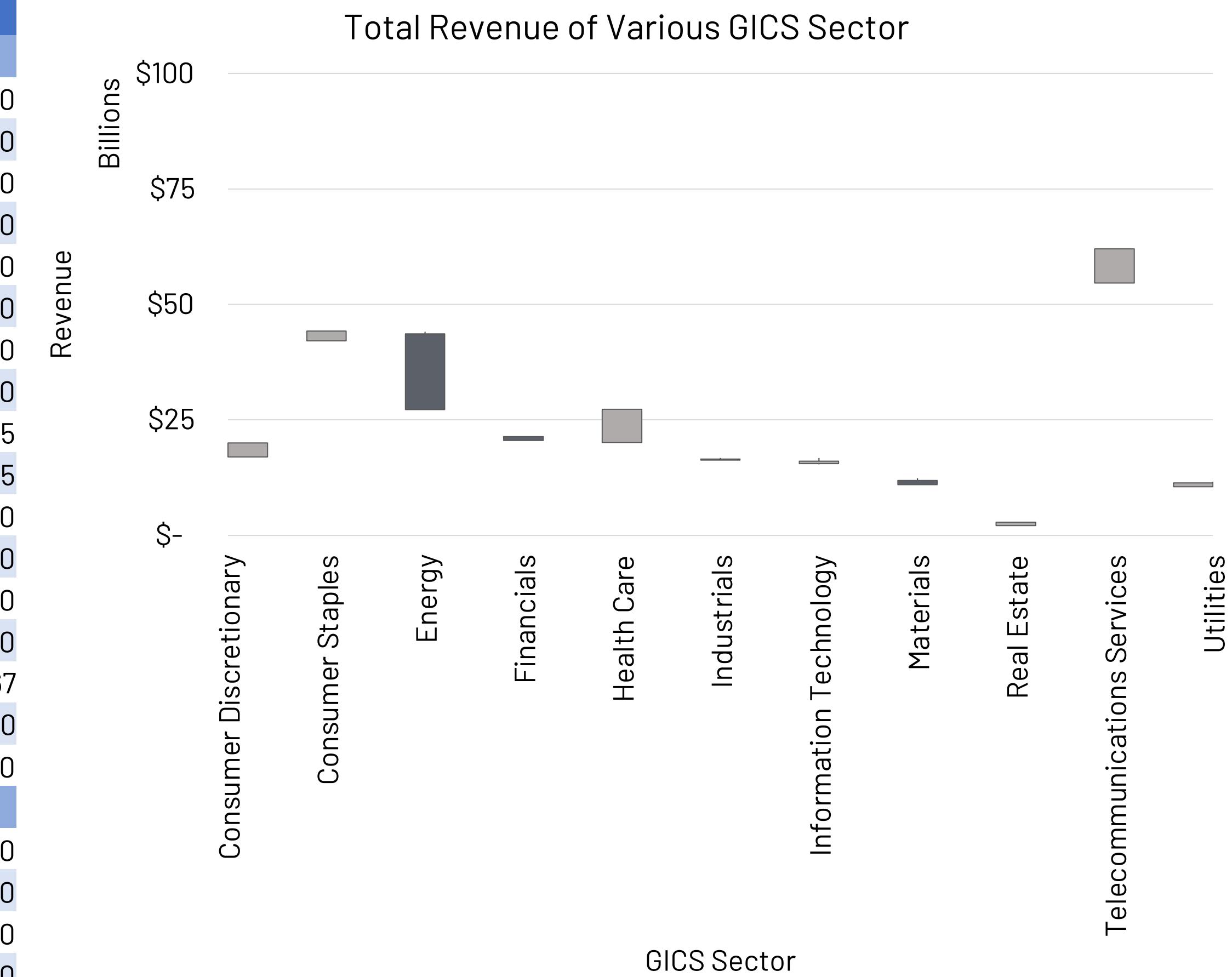


# Task 1 – What is the average revenue of companies for different GICS sectors?

## Descriptive Statistics of Telecommunications Services

- The Telecommunications Services has the highest average around \$58 bn.
- The minimum revenue is approximately \$54 bn and the maximum revenue was by \$62 bn, so The range of revenue is \$7.4 bn.
- The median of revenue is around \$57 bn for this four years and showing a left skewed distribution and is positively skewed. So the expansion of business is expected.
- The Standard deviation of revenue is \$3.2 bn which shows the variability of the revenue.

Telecommunications Services	
Descriptive Statistics	
Min	\$ 54.608.770.600
Q <sub>1</sub>	\$ 55.422.992.650
Median	\$ 56.757.800.000
Q <sub>3</sub>	\$ 58.872.200.000
Max	\$ 62.025.200.000
IQR	\$ 3.449.207.350
Q <sub>2</sub> -Q <sub>1</sub>	\$ 1.334.807.350
Q <sub>3</sub> -Q <sub>2</sub>	\$ 3.449.207.350
Q <sub>3</sub> +1.5*IQR	\$ 64.046.011.025
Q <sub>1</sub> -1.5*IQR	\$ 50.249.181.625
Upper Whisker	\$ 62.025.200.000
Lower Whisker	\$ 54.608.770.600
W <sub>upper</sub> -Q <sub>3</sub>	\$ 3.153.000.000
Q <sub>1</sub> -W <sub>lower</sub>	\$ 814.222.050
Standard Deviation	\$ 3.275.892.267
Average	\$ 57.537.392.650
Range	\$ 7.416.429.400
Revenue	
Year 1	\$ 54.608.770.600
Year 2	\$ 55.694.400.000
Year 3	\$ 57.821.200.000
Year 4	\$ 62.025.200.000



# Task 2 – Profit and Loss Statement

## Profit and Loss Statement

Company Ticker Symbol	EBAY			
	Year 1	Year 2	Year 3	Year 4
<b>Total Revenue</b>	\$ 8.257.000.000	\$ 8.790.000.000	\$ 8.592.000.000	\$ 8.979.000.000
COGS	\$ 1.492.000.000	\$ 1.663.000.000	\$ 1.771.000.000	\$ 2.007.000.000
<b>Gross Profit</b>	\$ 6.765.000.000	\$ 7.127.000.000	\$ 6.821.000.000	\$ 6.972.000.000
Sales, General & Admin.	\$ 3.260.000.000	\$ 3.593.000.000	\$ 3.660.000.000	\$ 3.499.000.000
R & D	\$ 915.000.000	\$ 983.000.000	\$ 923.000.000	\$ 1.114.000.000
Other Operating Expenses	\$ 136.000.000	\$ 75.000.000	\$ 41.000.000	\$ 34.000.000
<b>Total Operating Expenses</b>	\$ 4.311.000.000	\$ 4.651.000.000	\$ 4.624.000.000	\$ 4.647.000.000
<b>Operating Income / EBIT</b>	\$ 2.454.000.000	\$ 2.476.000.000	\$ 2.197.000.000	\$ 2.325.000.000

# Task 3 – Financial Forecasting Model

## Profit and Loss Statement (Forecasting)

Company Ticker Symbol	EBAY	Historical				Forecasting	
		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Total Revenue</b>	\$	8.257.000.000	\$ 8.790.000.000	\$ 8.592.000.000	\$ 8.979.000.000	\$ 9.265.652.633,10	\$ 9.561.456.589,51
COGS	\$	1.492.000.000	\$ 1.663.000.000	\$ 1.771.000.000	\$ 2.007.000.000		
<b>Gross Profit</b>	\$	6.765.000.000	\$ 7.127.000.000	\$ 6.821.000.000	\$ 6.972.000.000	\$ 6.136.259.298,28	\$ 5.400.699.680,97
Sales, General & Admin.	\$	3.260.000.000	\$ 3.593.000.000	\$ 3.660.000.000	\$ 3.499.000.000		
R & D	\$	915.000.000	\$ 983.000.000	\$ 923.000.000	\$ 1.114.000.000		
Other Operating Expenses	\$	136.000.000	\$ 75.000.000	\$ 41.000.000	\$ 34.000.000		
<b>Total Operating Expenses</b>	\$	4.311.000.000	\$ 4.651.000.000	\$ 4.624.000.000	\$ 4.647.000.000		
<b>Operating Income / EBIT</b>	\$	2.454.000.000	\$ 2.476.000.000	\$ 2.197.000.000	\$ 2.325.000.000	\$ 2.786.365.360	\$ 2.875.319.472

Operating statistics	Historical				Assumptions	
Revenue growth (%)		6,5%	-2,3%	4,5%	3,2%	3,2%
Gross margin	0,82	0,81	0,79	0,78	0,88	0,88
Operating margin	0,30	0,28	0,26	0,26	0,30	0,30