Analyzing Sub-Industry Performance in the IT Sector Using NYSE Data

Summary Statistics Analysis

Summary Statistics - First Year	
Mean	1,255,537,153
Median	590,000,000
Mode	0
Standard Deviation	2186640250
Minimum	0
Maximum	10,611,000,000
Range	10,611,000,000
Sum	74,076,692,000
Count	59
Summary Statistics - Second Year	
Mean	1,368,316,051
Median	584,000,000
Mode	0
Standard Deviation	2388786631
Minimum	0
Maximum	11,537,000,000
Range	11,537,000,000
Sum	80,730,647,000
Count	59

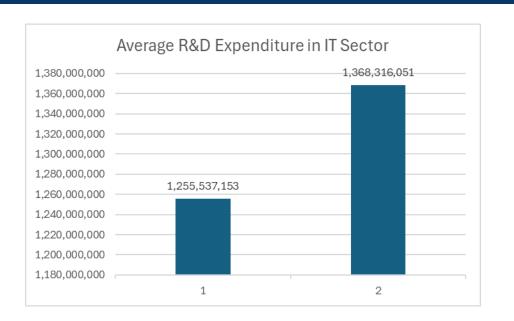
Which sub-industry within the IT sector has the highest average operating income?

The average operating income increased from \$1.26B in Year 1 to \$1.37B in Year 2.

Despite the increase, the median remained around \$584M-\$590M, indicating potential skewness from outliers (supported by the high standard deviation and large range).

This suggests that while a few companies drive the average up, the typical sub-industry operates closer to the median level.

Top Performing Sub-Industry (Average R&D Expenditure)



Average R&D per Year

1,255,537,153 1,368,316,051 R&D investments in the IT sector have grown significantly, from an average of \$1.26B to \$1.37B in one year. This suggests a strong innovation focus across top-performing sub-industries.

Conclusion on IT Sector Performance Trends

Based on our analysis of the IT sector:

- The Software sub-industry leads in terms of both average R&D spending and operating income.
- This suggests a strong correlation between **innovation investment** and **financial performance**.
- Other sub-industries like **Semiconductors** also show high operating income, but with lower R&D spending, implying operational efficiency.
- Our analysis highlights that the **Software** sub-industry leads in both average R&D expenditure and operating income.
 - This pattern suggests that in the IT sector, **higher investment in innovation** is often aligned with **higher financial performance**.
 - In contrast, sub-industries with **lower R&D spending**, such as Communications Equipment, tend to report **lower average income**, indicating a potential correlation between R&D strategy and long-term profitability.