

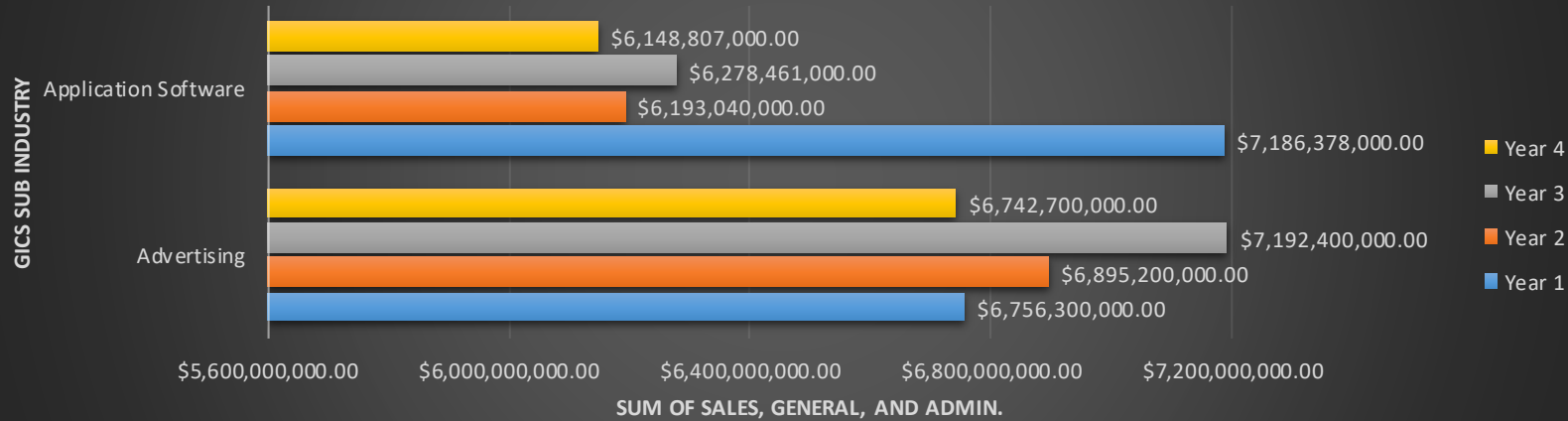
Business Analytics
Udacity Submission



Analyze NYSE
Data

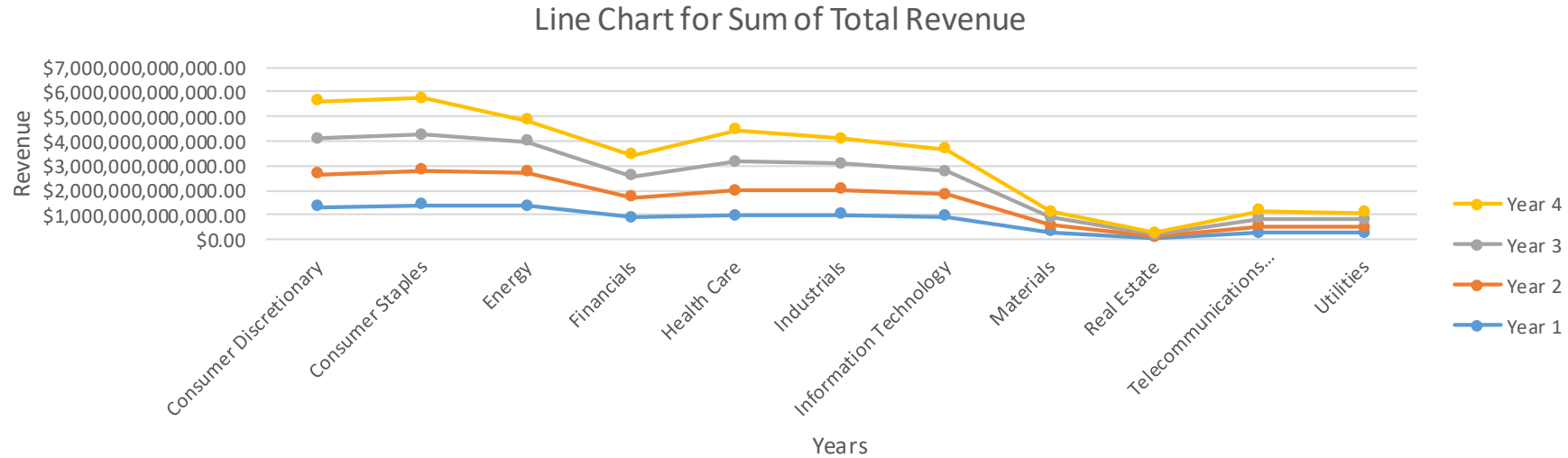
Does The Advertising Sector Have The Same Pattern For Sales, General And Admin Than The Application Software Sector In 2012 To 2015?

Bar Chart for Sum of Sales, General and Admin.



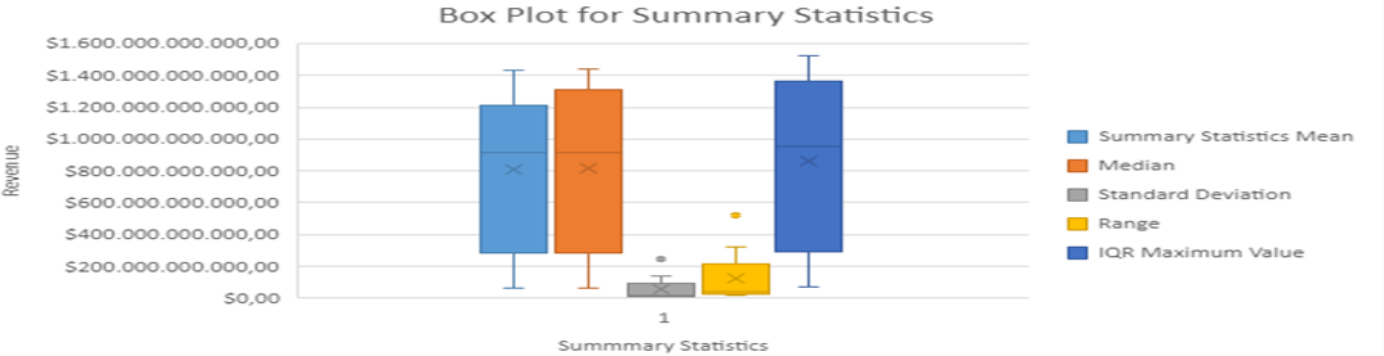
Here are the bar charts for annual sales, general, and admin expenses for the advertising and application software sector sub-industries reported for all companies throughout the year. If we look at the advertising sub-industry, the total expenditure increased in the first 3 years, then there was a decrease in expensing by 449 million dollars. Meanwhile, in the application software sub-industry, there was a decrease in expensing in 2013 and 2015.

How is the development of the total revenue of the telecommunications service sector from year to year?



- Here are the line charts for annual total revenue reported for all companies throughout the year.
- The line charts above show that in almost all industrial sectors there was an increase in total revenue.
- If we look at the communication service industry sector, the total income has increased every year.

Summary Statistics



Sum of Total Revenue	Column Labels					Summary Statistics				
Row Labels	Year 1	Year 2	Year 3	Year 4	Grand Total	Mean	Median	Standard Deviation	Range	IQR Maximum Value
Consumer Discretionary	\$1,306,636,524,000.00	\$1,359,506,280,000.00	\$1,433,673,899,000.00	\$1,523,851,904,000.00	\$5,623,668,607,000.00	\$1,405.917.151.750,00	\$1,396.590.089.500,00	94.321.533.189	\$ 217.215.380.000,00	1.523.851.904.000
Consumer Staples	\$1,388,801,763,000.00	\$1,428,526,946,000.00	\$1,453,416,640,000.00	\$1,459,100,902,000.00	\$5,729,846,251,000.00	\$1,432.461.562.750,00	\$1,440.971.793.000,00	31.991.816.565	\$ 70.299.139.000,00	1.459.100.902.000
Energy	\$1,352,502,544,000.00	\$1,366,043,920,000.00	\$1,271,860,937,000.00	\$843,707,367,000.00	\$4,834,114,768,000.00	\$1,208.528.692.000,00	\$1,312.181.740.500,00	246.742.166.065	\$ 522.336.553.000,00	1.366.043.920.000
Financials	\$878,187,750,000.00	\$843,392,964,000.00	\$850,512,546,000.00	\$843,303,463,000.00	\$3,415,396,723,000.00	\$853.849.180.750,00	\$ 846.952.755.000,00	16.573.510.151	\$ 34.884.287.000,00	878.187.750.000
Health Care	\$963,813,675,000.00	\$1,039,341,879,000.00	\$1,171,182,213,000.00	\$1,283,674,608,000.00	\$4,458,012,375,000.00	\$1,114.503.093.750,00	\$1,105.262.046.000,00	141.642.781.812	\$ 319.860.933.000,00	1.283.674.608.000
Industrials	\$1,010,796,852,000.00	\$1,029,253,211,000.00	\$1,037,676,179,000.00	\$1,026,094,777,000.00	\$4,103,821,019,000.00	\$1,025.955.254.750,00	\$1,027.673.994.000,00	11.225.762.351	\$ 26.879.327.000,00	1.037.676.179.000
Information Technology	\$917,269,645,000.00	\$908,093,059,000.00	\$955,502,612,000.00	\$881,926,904,000.00	\$3,662,792,220,000.00	\$915.698.055.000,00	\$ 912.681.352.000,00	30.469.652.974	\$ 73.575.708.000,00	955.502.612.000
Materials	\$285,223,746,000.00	\$291,555,004,000.00	\$295,549,075,000.00	\$251,951,155,000.00	\$1,124,278,980,000.00	\$281.069.745.000,00	\$ 288.389.375.000,00	19.872.423.619	\$ 43.597.920.000,00	295.549.075.000
Real Estate	\$55,010,248,000.00	\$61,768,962,000.00	\$69,673,022,000.00	\$74,766,197,000.00	\$261,218,429,000.00	\$65.304.607.250,00	\$ 65.720.992.000,00	8.700.179.073	\$ 19.755.949.000,00	74.766.197.000
Telecommunications Services	\$273,043,853,000.00	\$278,472,000,000.00	\$289,106,000,000.00	\$310,126,000,000.00	\$1,150,747,853,000.00	\$287.686.963.250,00	\$ 283.789.000.000,00	16.379.461.337	\$ 37.082.147.000,00	310.126.000.000
Utilities	\$252,177,719,000.00	\$264,966,001,000.00	\$278,755,544,000.00	\$273,125,907,000.00	\$1,069,025,171,000.00	\$267.256.292.750,00	\$ 269.045.954.000,00	11.536.810.267	\$ 26.577.825.000,00	278.755.544.000
Grand Total	\$8,683,464,319,000.00	\$8,870,920,226,000.00	\$9,106,908,667,000.00	\$8,771,629,184,000.00	\$35,432,922,396,000.00					

- Here are Box Plot charts for a summary of annual statistics on the New York Stock Exchange for 4 years. In these results, the median for the Telecommunication Services industry sector is 283 billion dollars, while the median for the Energy industry sector is 1.312 trillion dollars. For the standard deviation of the Telecommunications Service industry sector is 16 billion dollars. Then the standard deviation of the sector of the Energy industry is more than 200 million dollars. From these values we can conclude that the Energy industry is more spread than the Telecommunications Service industry including that the variability of costs is also higher. In addition, the energy sector industry spent more total operating costs of 1.312 trillion than other sectors.
- The total revenue range in the Finance Industry is lower than in the Consumer Staples industry, which shows that the total revenue in the Consumer Staples industry is more volatile than in the Finance industry."
- The mean total revenue for companies categorized in the Finance industry (\$853,849,180,750.00) is lower than the mean total revenue for all Consumer Staples industries (\$1,432,461,562,750.00). It is likely that companies in the Consumer Staples industry have higher total revenue than all industries categorized under Finance.

Resource

- <https://www.youtube.com/watch?v=njrBrHFNxf8>