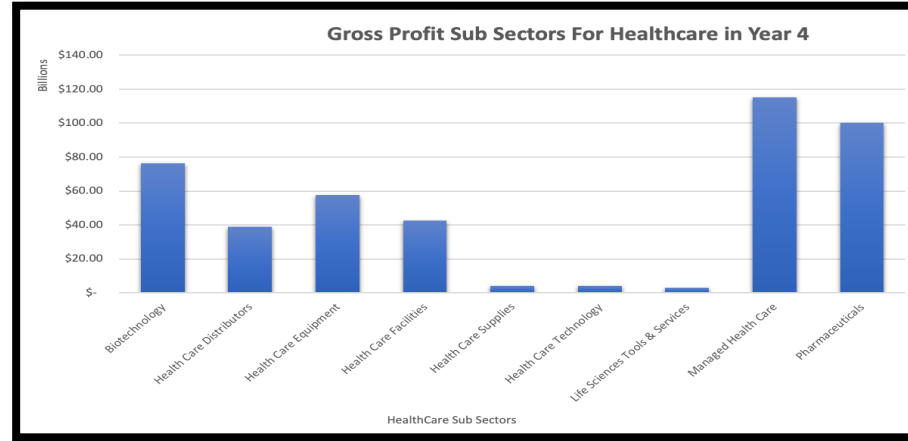Mohammed Alrashidan
Udacity Project 2 NYSE
Business Analytics NanoDegree

How is the Gross Profit for IT Industry and its Sub Sectors in Year 4 compared to HealthCare Industry in Year 4?

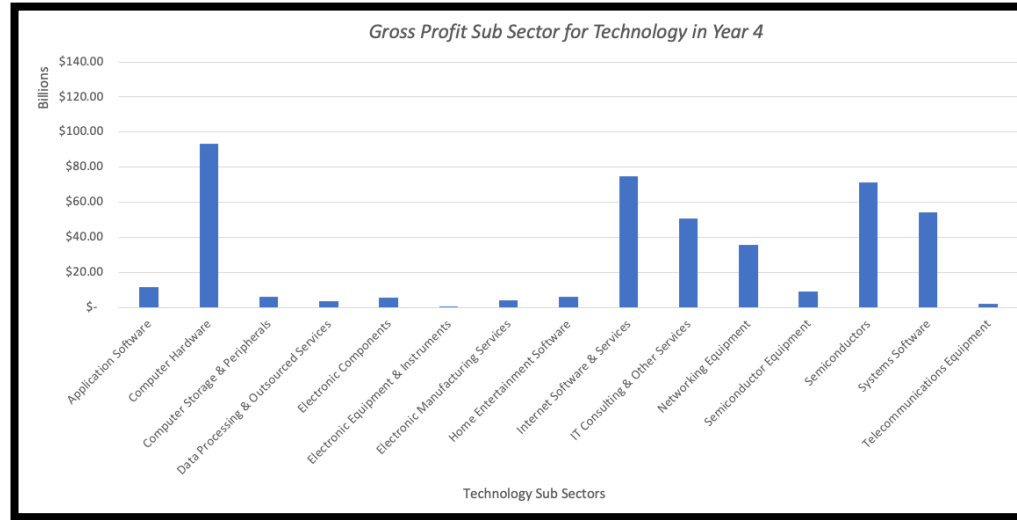| HealthCare			Technology		
Gross Profit By Sub Sector in Year 4			Gross Profit By Sub Sector in Year 4		
Biotechnology	$	76,517,857,000	Application Software	$	11,428,922,000
Health Care Distributors	$	39,094,525,000	Computer Hardware	$	93,261,000,000
Health Care Equipment	$	57,495,370,000	Computer Storage & Peripherals	$	6,050,000,000
Health Care Facilities	$	42,736,303,000	Data Processing & Outsourced Services	$	3,707,557,000
Health Care Supplies	$	4,013,027,000	Electronic Components	$	5,525,500,000
Health Care Technology	$	4,017,357,000	Electronic Equipment & Instruments	$	753,561,000
Life Sciences Tools & Services	$	3,102,035,000	Electronic Manufacturing Services	$	4,033,000,000
Managed Health Care	$	115,317,600,000	Home Entertainment Software	$	6,121,000,000
Pharmaceuticals	$	100,269,500,000	Internet Software & Services	$	74,670,779,000
			IT Consulting & Other Services	$	50,922,800,000
Total Gross Profit of Sub Sectors	$	442,563,574,000	Networking Equipment	$	35,696,429,000
			Semiconductor Equipment	$	8,951,024,000
			Semiconductors	$	71,511,213,000
			Systems Software	$	54,282,601,000
			Telecommunications Equipment	$	2,335,000,000
			Total Gross Profit of Sub Sectors	$	429,250,386,000

From the data, we can see that the gross profit in Year 4 in Healthcare is $442B and Technology is higher $449B. It is obvious that both industries are slightly close in Gross Profit for Year 4

Gross Profit in Year 4 - Healthcare

However, when we break it down by Sub Sectors, we are able see how the Gross Profit for Year 4 has performed. The *"Gross Profit in Sub Sectors For Healthcare" bar graph, show the total Gross profit by sub sectors for Healthcare industry. We can see that the highest two Sub Sector are "Managed Health Care" estimated Gross Profit of $115B and the second is "Pharmaceutical" is $100B.*

Gross Profit in Year 4 - Technology

Gross Profit Sub Sector for Technology in Year 4

Also, 3 of the sub sectors in Health care are below $20B. On the Other Hand, Sub Sectors in Technology are very competitive since there 15 sectors. From the graph "Gross Profit Sub Sector for Technology", the highest Gross Profit is Computer Hardware Sector with $93B, yet its less than Healthcare highest sector. 9 Sectors of Technology are lower than $20B Gross Profit compared to HealthCare.

Gross Profit Report (measure of centrals)

Healthcare				Technology		
Average	$	49,173,730,444		Average	$	28,616,692,400
Median	$	42,736,303,000		Median	$	8,951,024,000
Standard Deviation	$	42,051,990,533		Standard Deviation	$	31,924,919,269

The mean Gross Profit of Sub Sectors for Healthcare industry in Year 4 is $49B and the Technology is less with $28.6B. The median of Sub Sectors in HealthCare is $42B while Technology is $8.9B. Also, the standard deviation of Gross Profit healthcare is $42B, and Technology Sub Sectors is $31.9B.

To conclude, we see that Technology sub sectors is higher in total of Gross Profit than healthcare. However, we notice that the mean of healthcare sub sectors are higher that's because Technology has a lot of sectors and Gross profit distribution effected the total to make less. Moreover, SD of Technology is larger than its average which tells us that the spread of data is spread out and very close to the mean. However, SD in Healthcare is smaller than the mean which illustrate that the data are clustered and has less variety of spread.