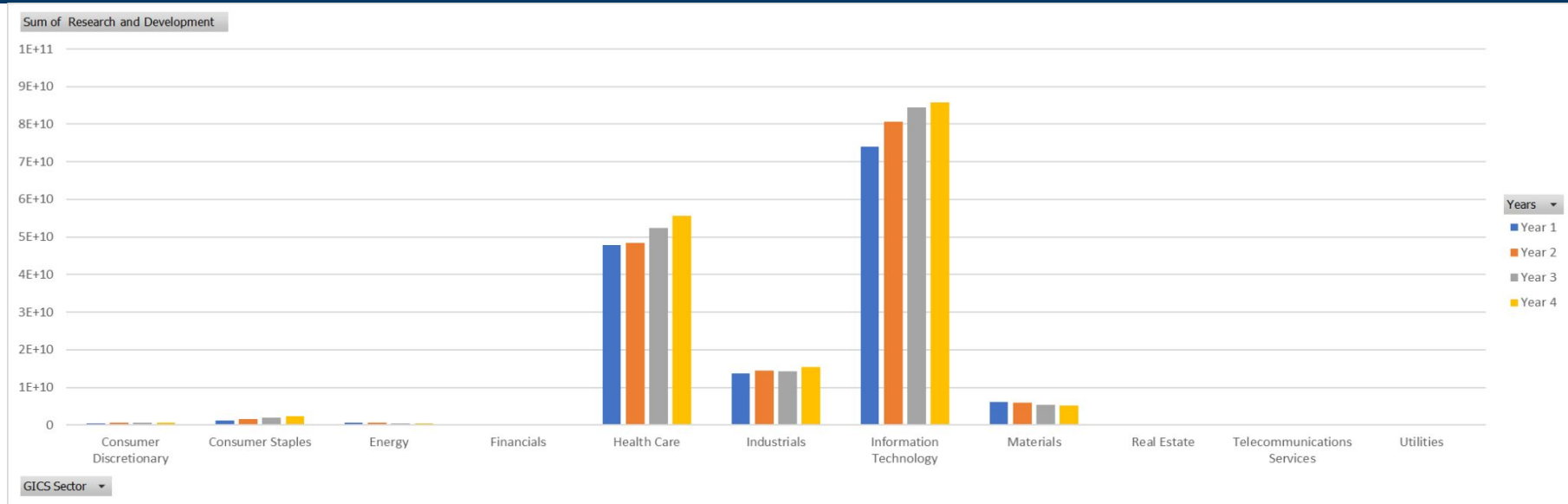


# Analyze NYSE Data

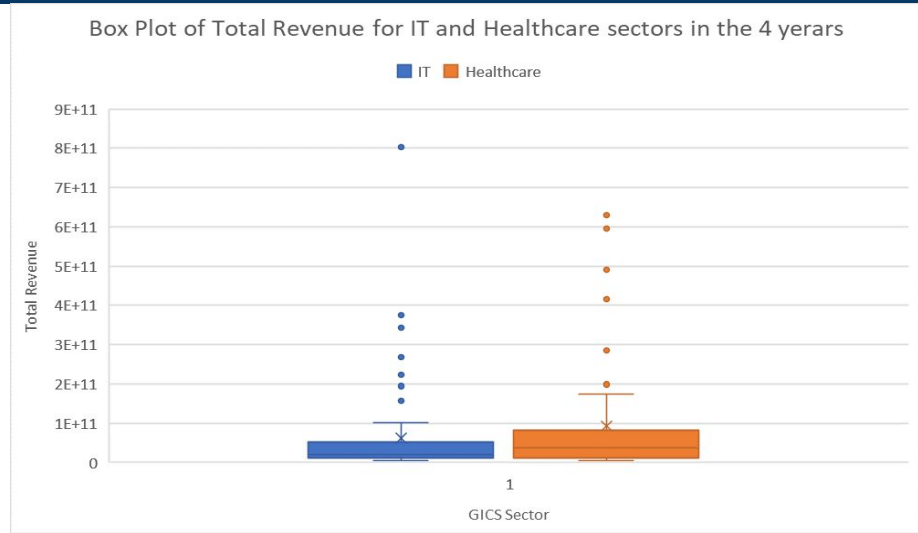
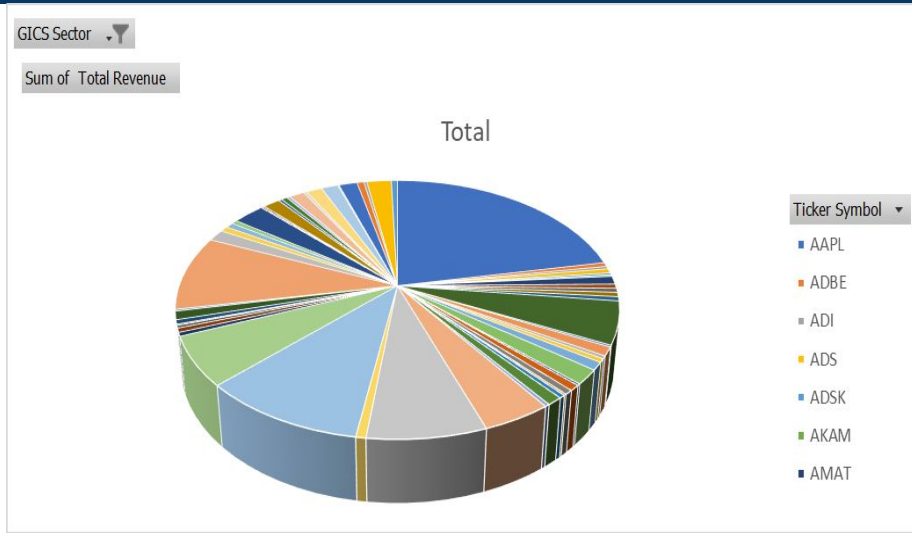
**Jorge Ballesteros Serrano**

# Which sectors did have more R&D investment over the 4 years period?



- There are clearly 4 sectors that have spent considerable more money in R&D during 2012 and 2015: Health Care, Industrials, Information Technology and Materials,
- From these ones Health care and IT are the most R&D intensive along the 4 years.
- In all the sectors the R&D expenditure increases over time but with the expectation of the Materials industry which follows a decline on R&D expenditure over time
- As comparative, I have calculated how much the IT industry spends in R&D compared to the average from all the sectors: which amounts for a 89437% more. (It must be noted that these huge number it is better understood if we take a look at the graph and see that 7 out of 11 industries spend very little in R&D, and even 2 of them have spent 0 \$ over the 4 years)

# How is the revenue of the IT sector distributed and how it does compare to the healthcare one?



- The pie chart reveals that Apple has the biggest earnings by far inside the IT sector, followed by a couple more companies like IBM, Microsoft and Intel from a total of 59 IT companies in the dataset.
- The right chart shows a Box plot that shows the spread of the total revenue and compare the IT and the healthcare sectors.
- From this box plot we can reaffirm what we have seen in the pie chart about the unequal distribution in the total revenue of the IT companies. Where the majority find their 4 years revenue under one hundred billion dollars and just 7 of them triple, quadruple and even multiply by 8 those revenues.
- On the other hand we can appreciate that the healthcare sector is also very spread. And in the comparison with the IT sector, here companies have a larger range of total revenues and also the outliers (highest earning companies) are less (1 less) and the farthest outlier is less far away from the box plot. Which means that here there is a higher competition between companies without a clear dominant company