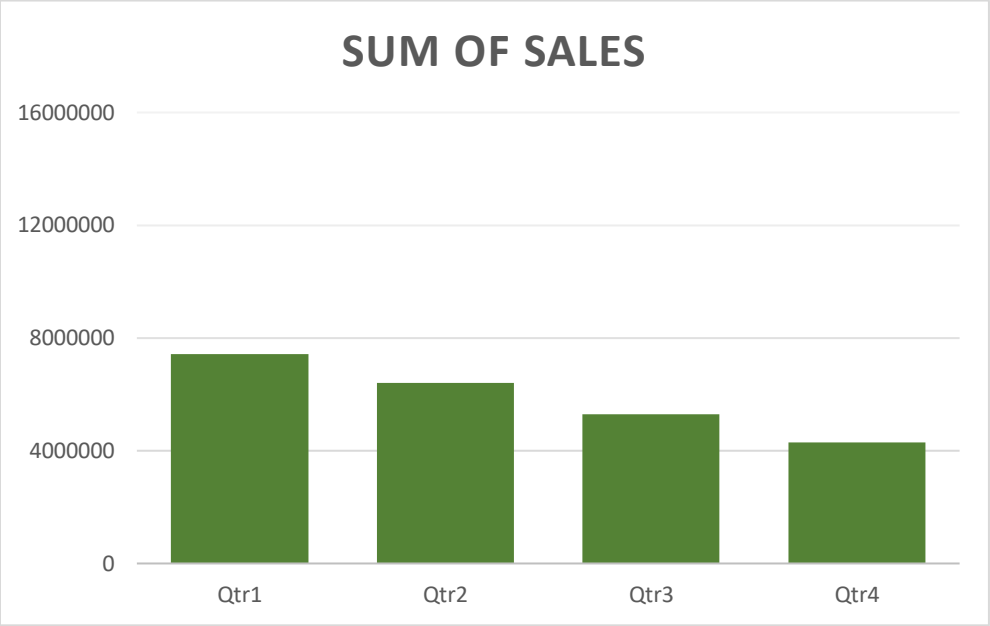
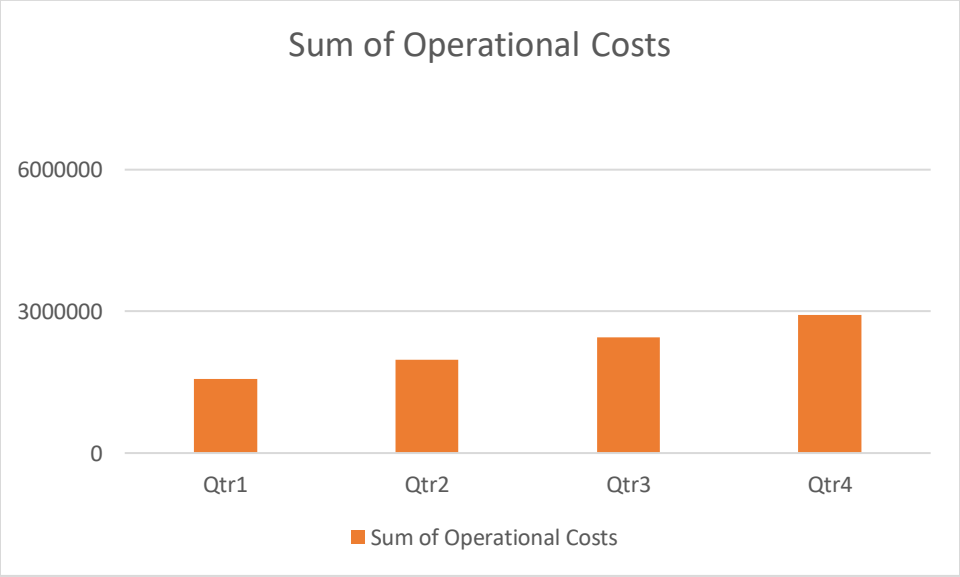
Information Visualize

Homework-2

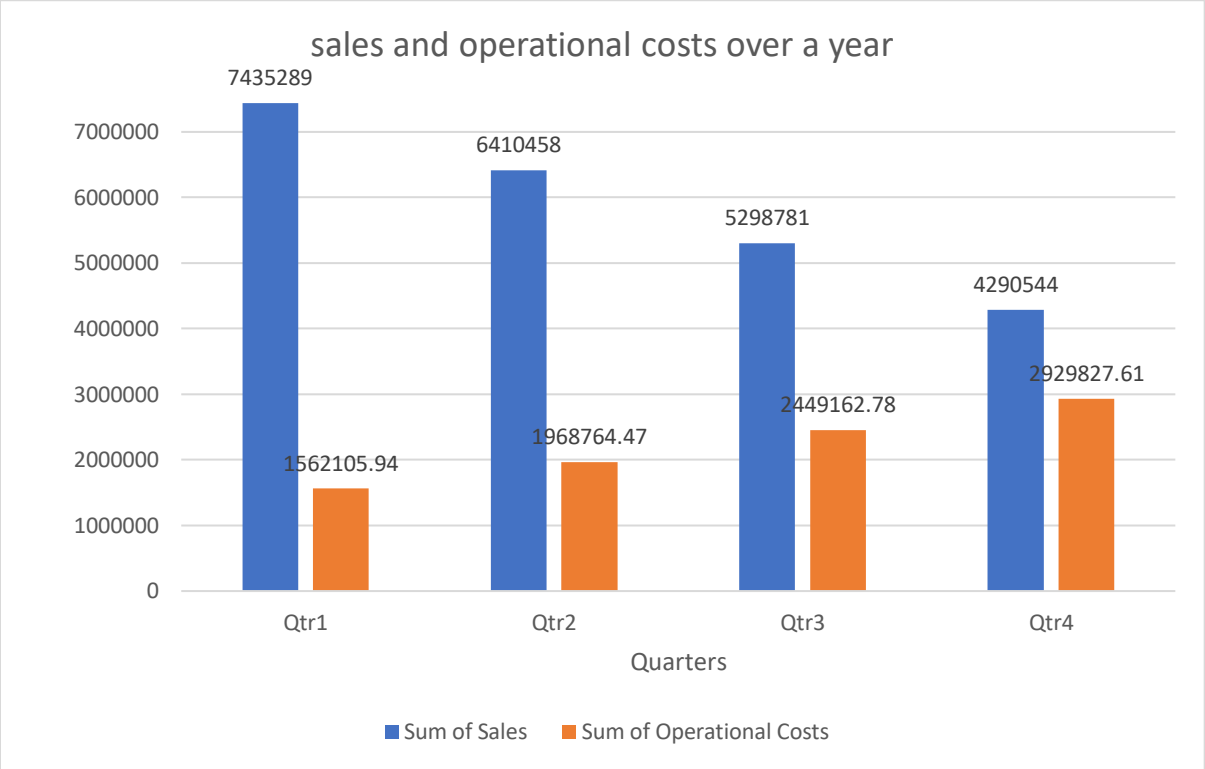
1)



As observed, I have increased the value of the y-axis to 16 Million which shows the sales have declined by 2 units within 4 quarters.



Similarly, in the above case, the bin size has been increased and the increase in y-axis limits make the operational costs look small.



From the above observation, by placing both the sales and operational costs together rise in operating costs and a fall in sales happening at the same time can be observed. Using Tuftes' theory we have reduced the ink space by using a single chart to explain the dynamics of both sales and operational costs at the same time.

2. c) Tufte's theory on graphical excellence- According to Tufte, excellence in statistical graphics consists of complex ideas communicated with clarity, precision, and efficiency. Graphical displays should be –

-showing the data,

-avoid distorting what is data saying,

-we should be presenting more numbers in small space,

-induce the viewer to think about the substance rather than about methodology, graphic design, technology of graphic production,

-to make the large datasets coherent,

-we should encourage the eye to compare different pieces of data,

-reveal the data at several levels of detail,

-from broader overview to the fine structure,

-serve reasonably clear purpose: description, exploration, tabulation, or decoration,

-to be closely integrated with the statistical and verbal descriptions of a dataset.

Graphics reveal data. Indeed graphics can be more precise and revealing than conventional statistical computations.