Sales Analysis for Texas

Ed Whitten and Conrad Hill

Executive Summary

We started this analysis of Texas' sales by looking at the data from a high level of granularity to build a overall view of the business and its business results from 2011-2014. We started out with figures 1.1 and 2.1 to get a general overview. From there we went into more detail with them by breaking them down by month, segment, and category (Figures 1.2, 2.2, 3.1, and 3.2). After this the main thing that stood out was how low the overall profits were for Texas as a whole. We decided to look into this further and is the area we decided to focus on. We made figure 4.1 to look at the profit percentages and which categories were doing poorly. From there we made figures 5.1 and 5.2 to look at which specific subcategories of products were losing the most money. Finally we made figures 6.1 and 6.2 to easily compare the number of sales being made to the profits being generated. Below are our main takeaways and associated recommendations from our analysis.

A) The consumer segment has the most sales, continue to focus mainly on that segment. Consider promoting the other segments that are lacking to increase sales or reduce the offerings in those segments to cut costs. (1.1 1.2). In general, there is a decrease in the number of sales between the months of May and July, consider increasing the promotional budget for these months in order to generate more sales. (1.2)
B) Overall sales numbers are respectable, but the profits are negative throughout the years sampled, consider cutting costs. This could potentially be done by purchasing products from cheaper suppliers. (2.1, 2.2)
C) In terms of categories, focus on technology as it is the only one with positive profit percentages and profit earnings as a whole. Continue to promote the technology category and possibly explore more options to expand the category. (4.1)
D) There is potential in the Furniture category, as it's profit percentages aren't reprehensibly low. Focus on reducing costs in this category and it could increase in profitability. (4.1)
E) The office supplies category has the lowest profit percentages. Consider dropping this category as it doesn't account for a large amount of total sales and continually loses money. (4.1)
F) When profits are broken down into sub-categories by product, consider dropping binders, appliances, bookcases, chairs, and furnishings due to the lack of profit that these products generate. If we still want to offer these products, consider looking into new suppliers. (5.1, 5.2)
G) Sales number seem reasonable across the different categories as a whole. So it would make sense to continue selling products in all categories. (3.1, 3.2)
H) Despite having decent sales the profits generated continue to be negative. Costs need to be cut in some way to ensure profits are generated from the sales. Consider exploring new suppliers or reducing the size of the workforce. More data would be needed to figure out where the majority of costs are being incurred. (6.1, 6.2)

Figure 1.1

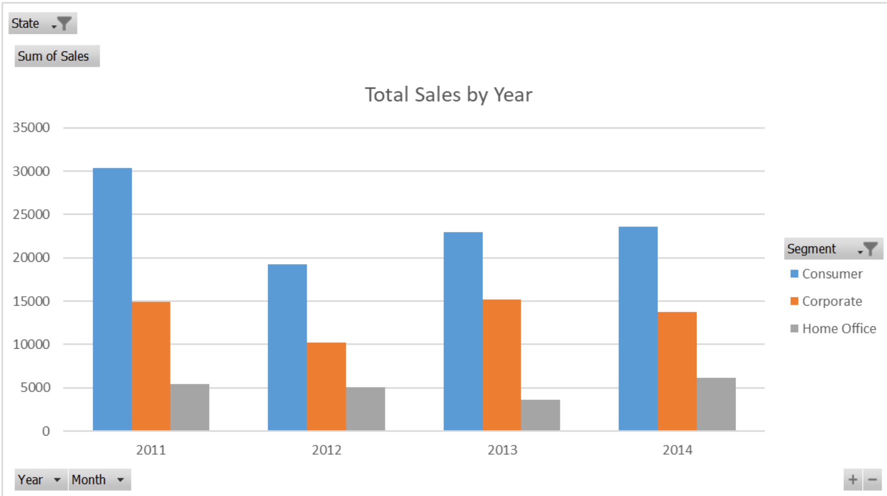

Figure 1.1 shows the Total Sales by Year based on consumer, corporate, and home office market segments. The chart shows a consistent trend of sales for each of the years, with the consumer market segment dominating the overall sales amounts. As per recommendation A (seen on the executive summary), our company should continue to focus on the consumer market, as it produces the largest amount of sales. The company could also consider increasing promotional campaigns based on the other two markets; or if promotion is not an option, cut involvement with those markets in order to cut costs.

Figure 1.2

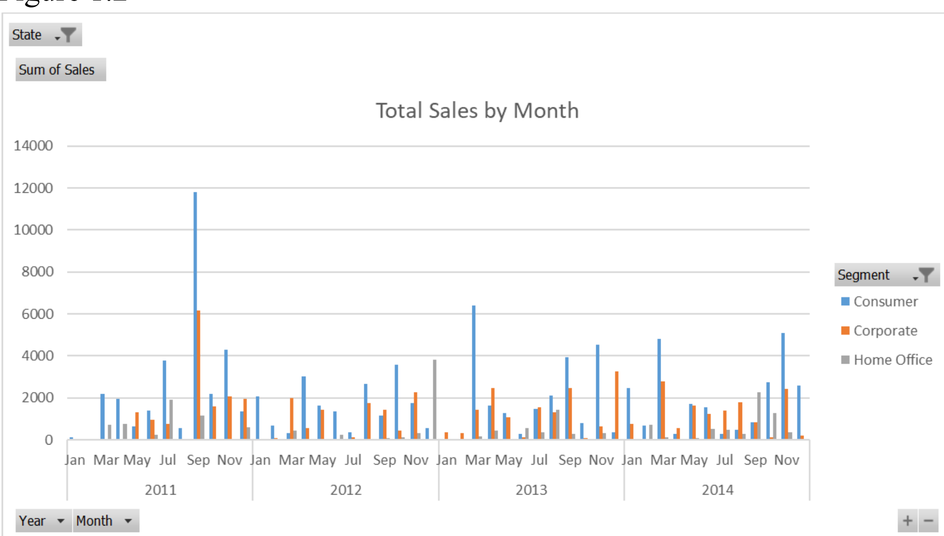

Figure 1.2 shows the total sales by month for all four years. When analyzing this graph, we realized that there is a consistent dip in sales during the months of May to July. We recommend that the company expend more resources on the promotional budget during these months of the year in order to increase awareness and sales during these slow months.

Figure 2.1

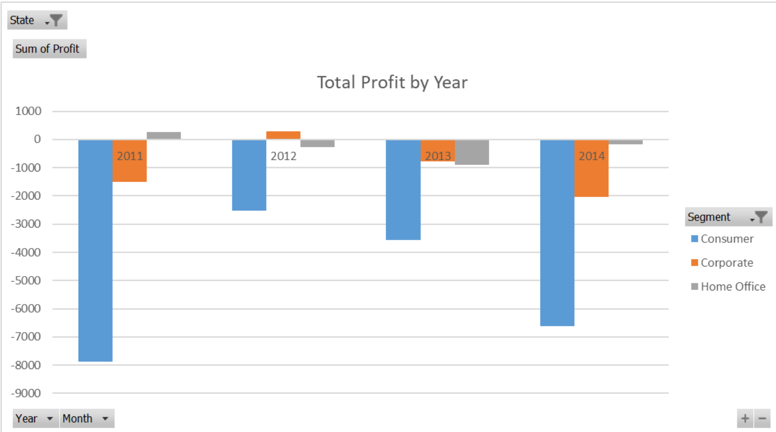

Figure 2.1 shows the total profit by year based on our business' three market segments. The chart shows a consistent trend of negative profits for nearly all four years. The consumer market segment appears to be the largest loss of profit when compared to the other market segments.

Figure 2.2

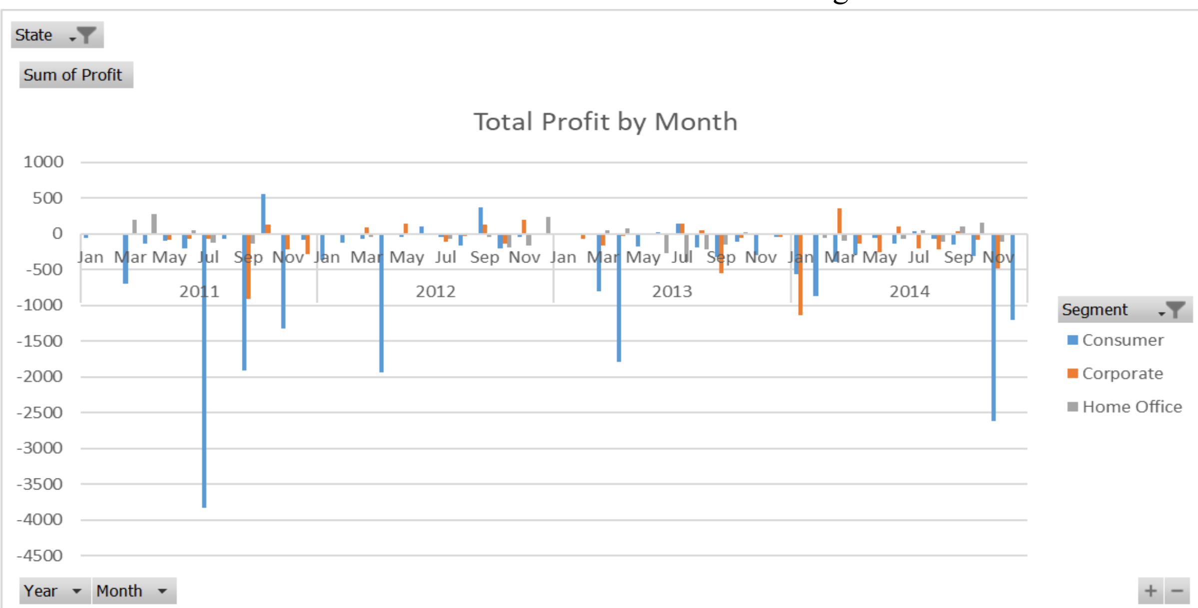

Figure 2.2 does a better job at showing the specific months where profit dipped into the negative numbers. While our company has great sales numbers in the state of texas, it's profits are highly unacceptable. We recommend that the company chooses different suppliers so that they may lower their overall costs (As stated in recommendation B).

Figure 3.1

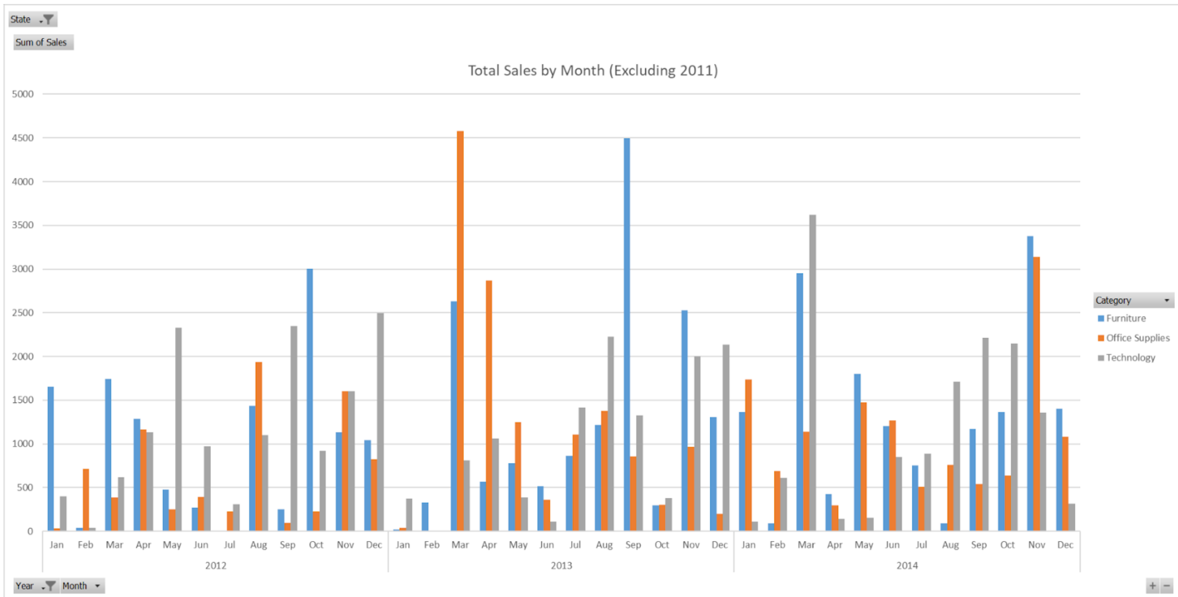

Figure 3.1 shows the total sales each month broken down by category while excluding 2011. 2011 was excluded in this figure because there was a huge sale in the technology category. This through off the scale of the data and made it harder to read. The main takeaway here is that the sales across all the categories were decent. No category really stood out as being the one that generated more sales than the other categories. This related to recommendation G and we should continue to offer products in all of these categories.

Figure 3.2

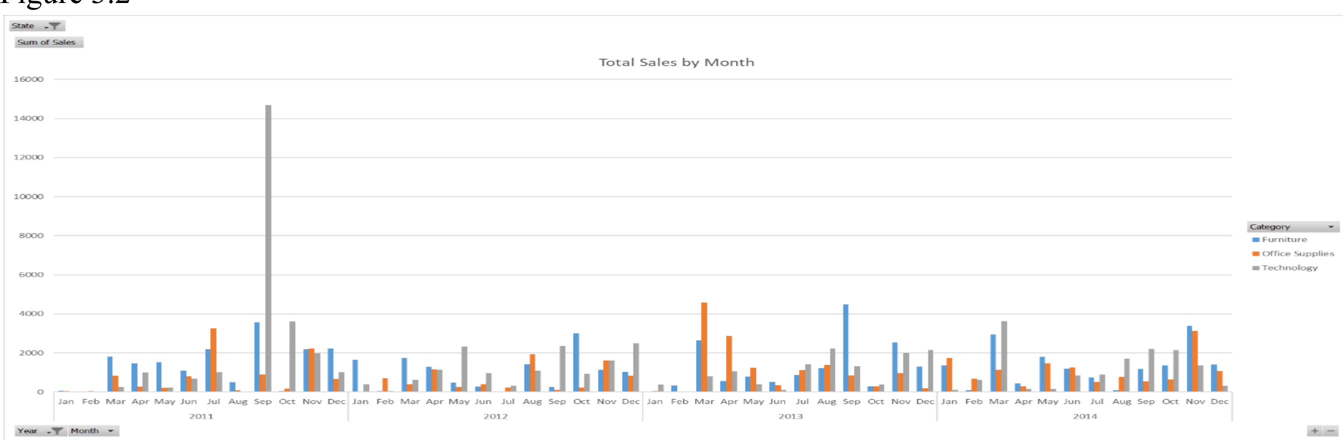

Figure 3.2 shows all of the same information as 3.1 except it includes the year 2011 with the large outlier in technology. This figure shows how much the outlier affects the readability and scale of the graph.

Figure 4.1

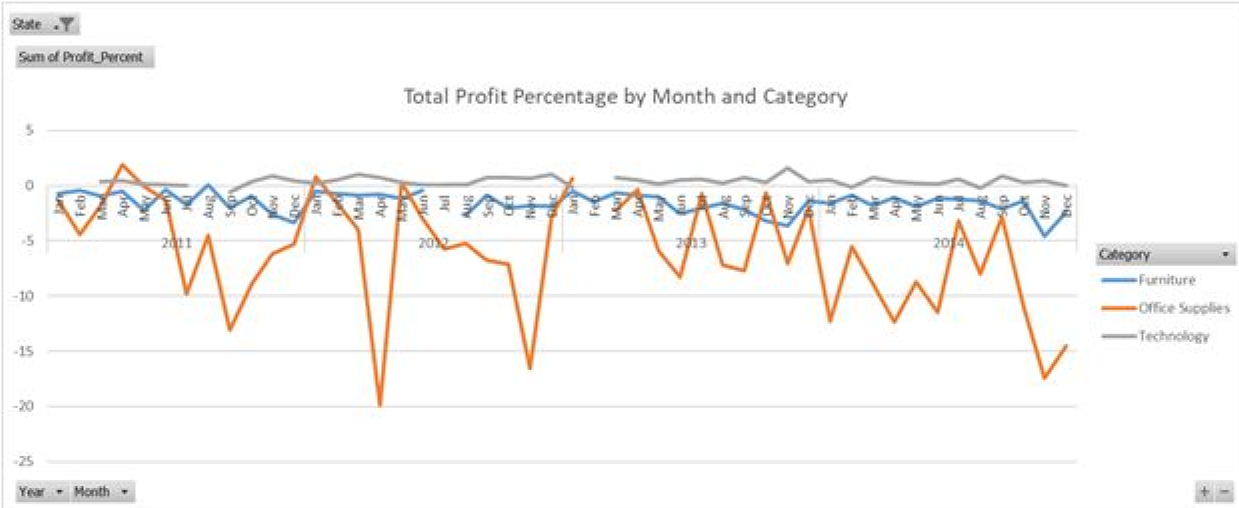

Figure 4.1 shows the total profit percentage by month and category of items sold. By viewing the chart, one can see that office supplies and furniture sales are generally negative in overall percentage of profit. While these two item categories produce negative profits, the technology category produces positive ones. We recommend that the company invest more time and effort into developing their technology labed products and their respective markets, as it is shown that they sell for a sustainable amount of profit. The furniture category of products produce profits near the baseline of zero and should be considered when cutting costs in order to make the segment more profitable in the long run. The office supplies category produces the largest percent of negative profit and should be considered for severe cuts or termination, since it doesn't accumulate the most sales for the company as a whole (As seen on recommendations C, D, and E).

Figure 5.1

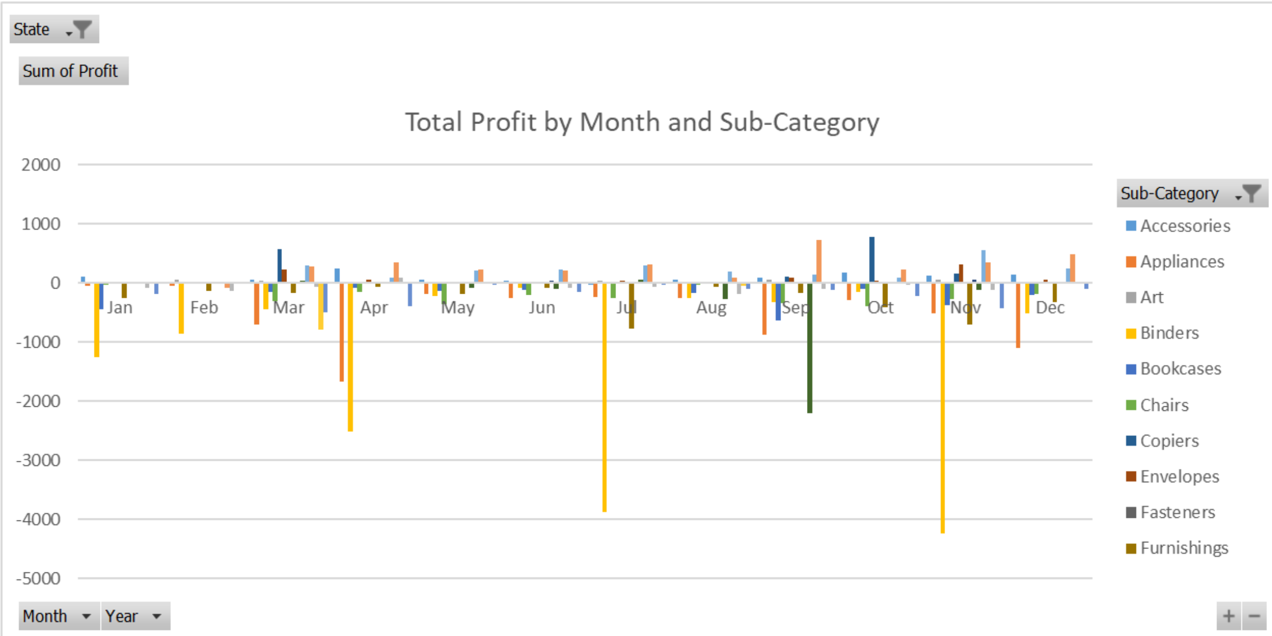

Figure 5.1 shows all of the profits broken down by sub category. This goes along with recommendation F. As can be seen in this graph binders, appliances, bookcases, chairs, and furnishings are consistently losing money. This needs to be looked into further to see why this is the case. From there appropriate actions should be taken to try and make these sub categories profitable. Otherwise we should consider dropping out offerings in these subcategories all together if they continue to lose money.

Figure 5.2

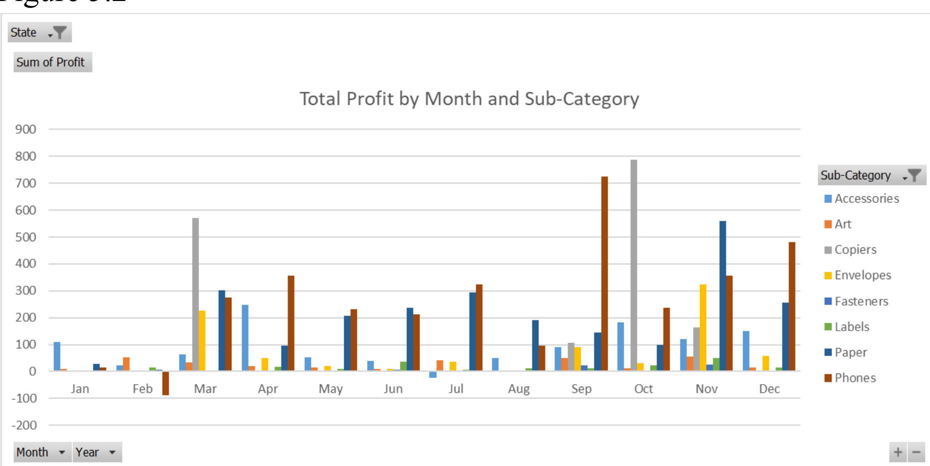

Figure 5.2 goes along with recommendation F and shows only the sub categories that generally turn a profit. We should continue to sell these sub categories of profits and potentially look into ways of generating more sales in these subcategories in order to drive up profits as a whole. We could potentially generate more sales in these sub categories by running promotions in within these sub categories. Phones and paper are generally strong earners so an emphasis should be placed on these sub categories.

Figure 6.1

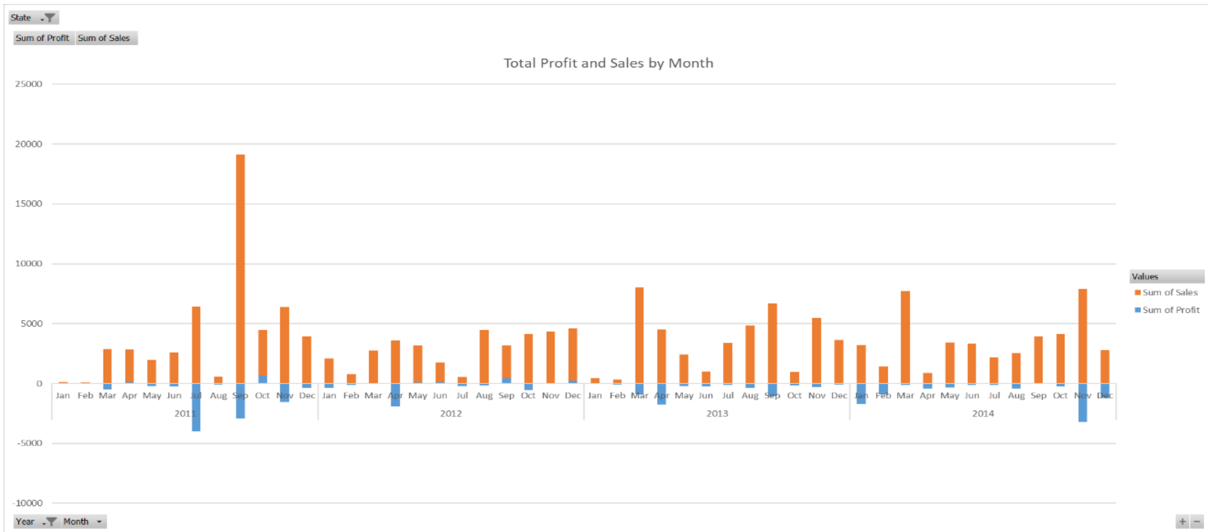

Figure 6.1 goes along with recommendation H and shows the relationship between our sales and profits generated off these sales. It make it easy to compare the two and see that despite having decent sale snumber the profits being earned are still severely lacking. This figure also includes the outlier from 2011.

Figure 6.2

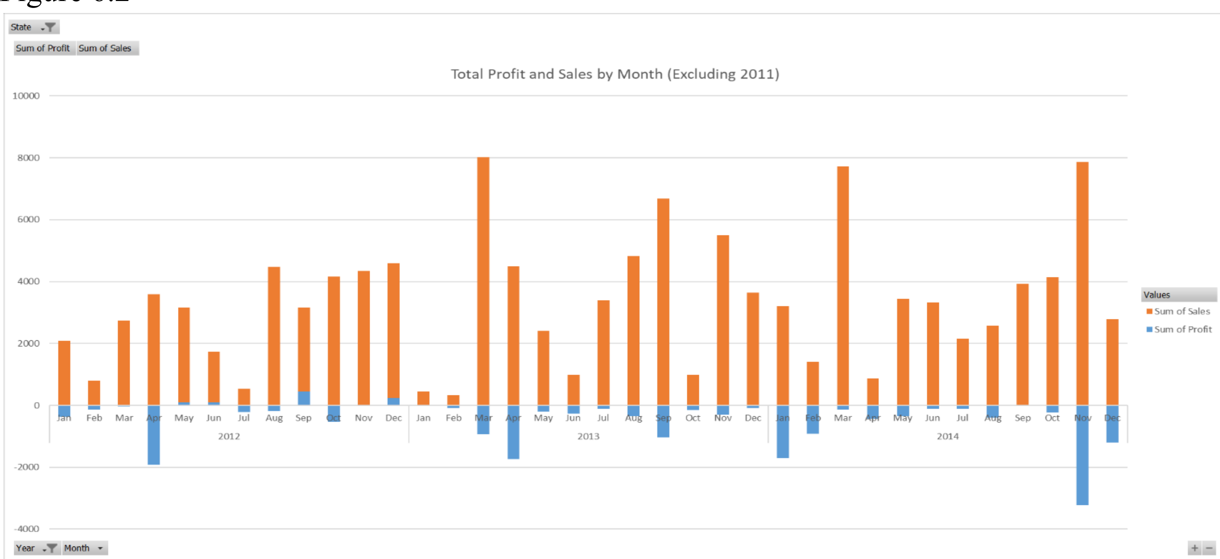

Figure 6.2 is the same visualization as Figure 6.1 except year 2011 is excluded due to the outlier effect on the readability of the graph.