To: Jie G. Fowler

From: William Thomas, Joe McCranie, Jarius Little

Date: April 19, 2017

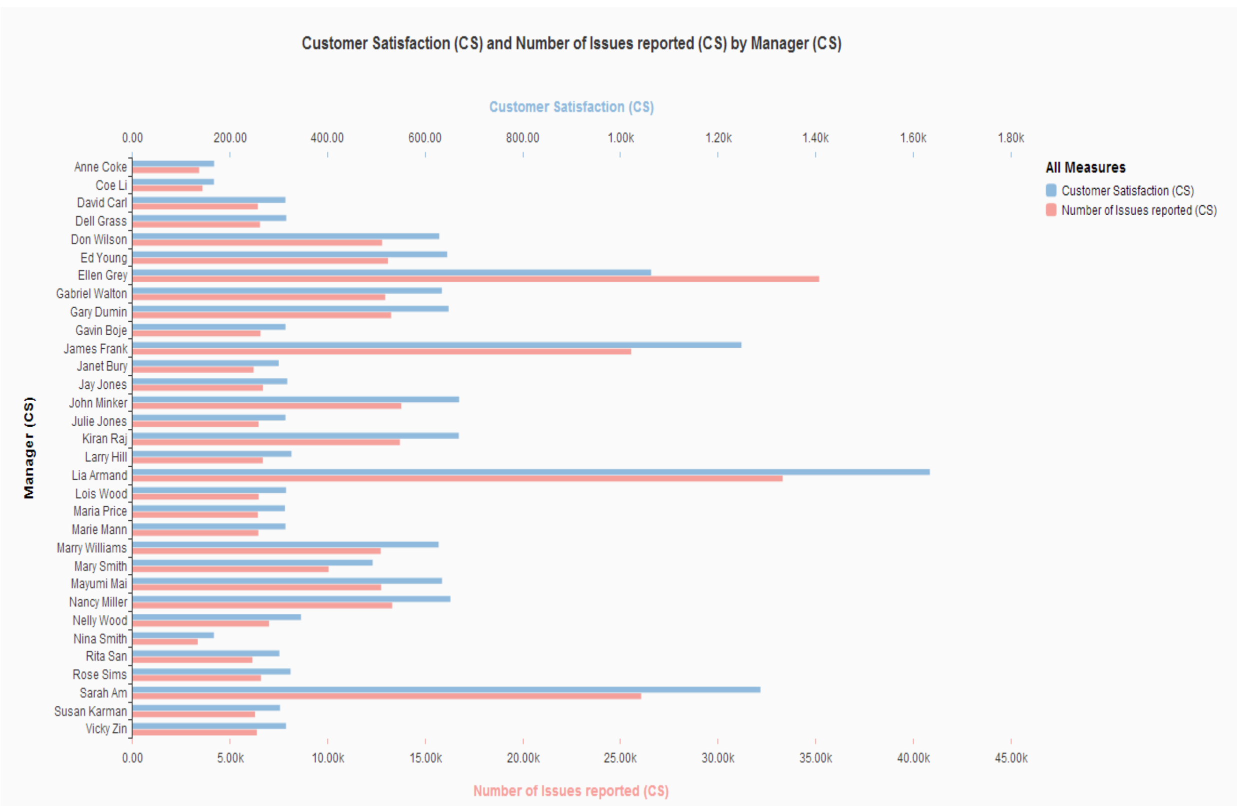
Subject: Memo 4

Introduction

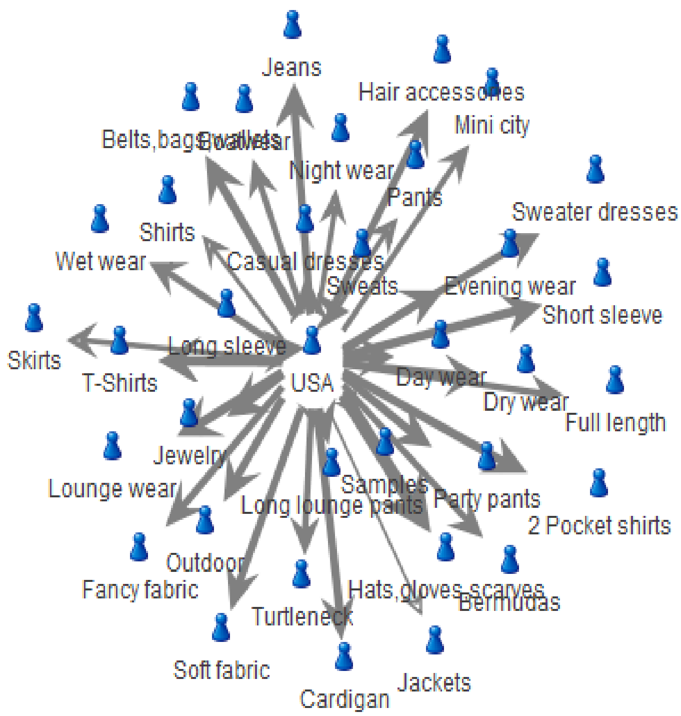
In the following memo, different datasets were analyzed using SAP Predictive Analytics. Multiple Key Performance Indicators (KPIs) were generated to give increased perspective into the data. There were three particular areas that were focused upon in the process: Customer Satisfaction, Sales Data, and Retail Data. The group believes that by determining the exact amounts of profit margins, a new marketing plan could be developed to capitalize upon current market conditions. Additionally, observing customer satisfaction is a key to helping formulate the promotional mix. A variety of visualizations will be included with the datasets that help determine and pinpoint relationships between the different variables.

This data includes a variety of variables, including gross margin, customer satisfaction percentage, revenues, commission values, and issues reported. The customer satisfaction and retail data sets carry many of the same variables but are, largely, measuring different values and relationships.

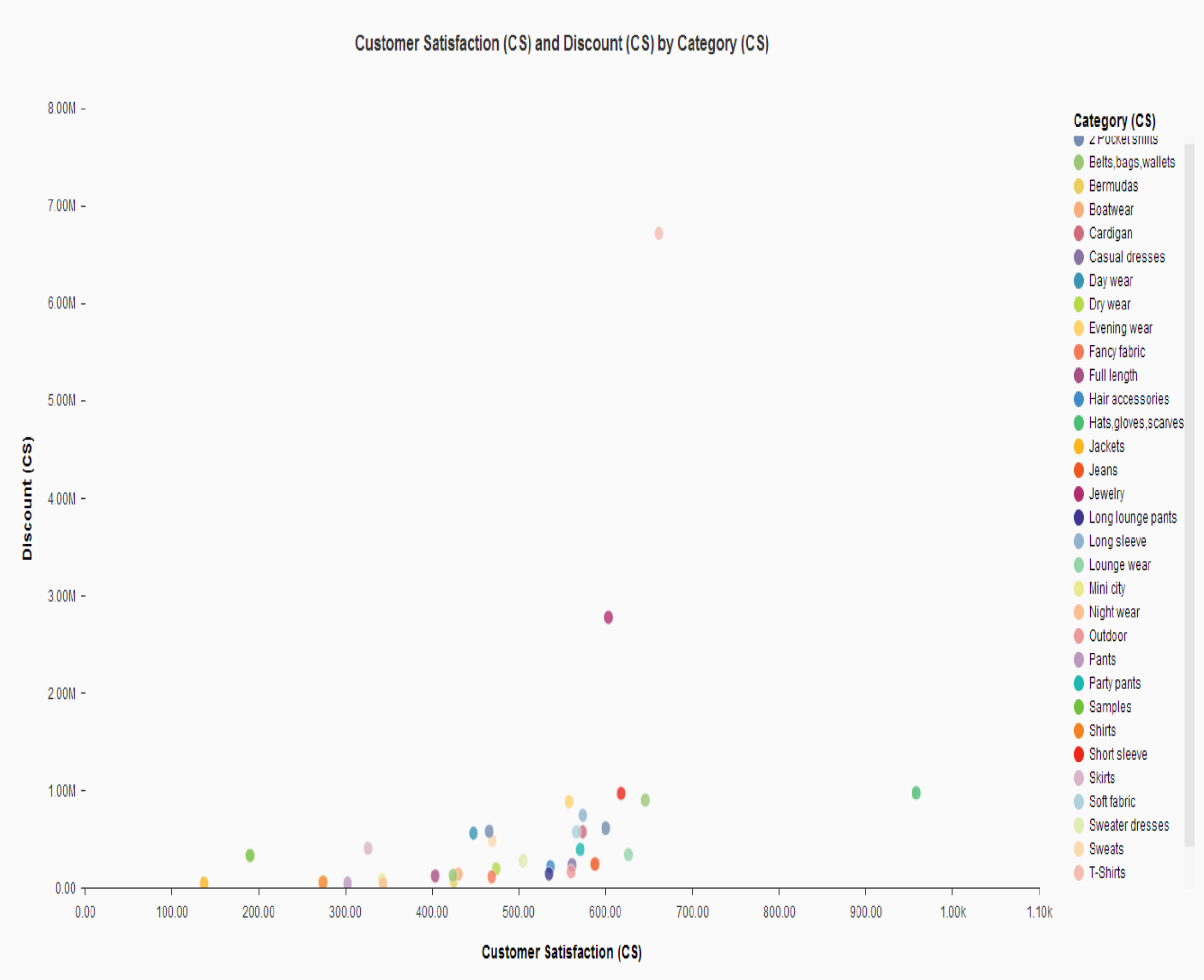
Customer Satisfaction



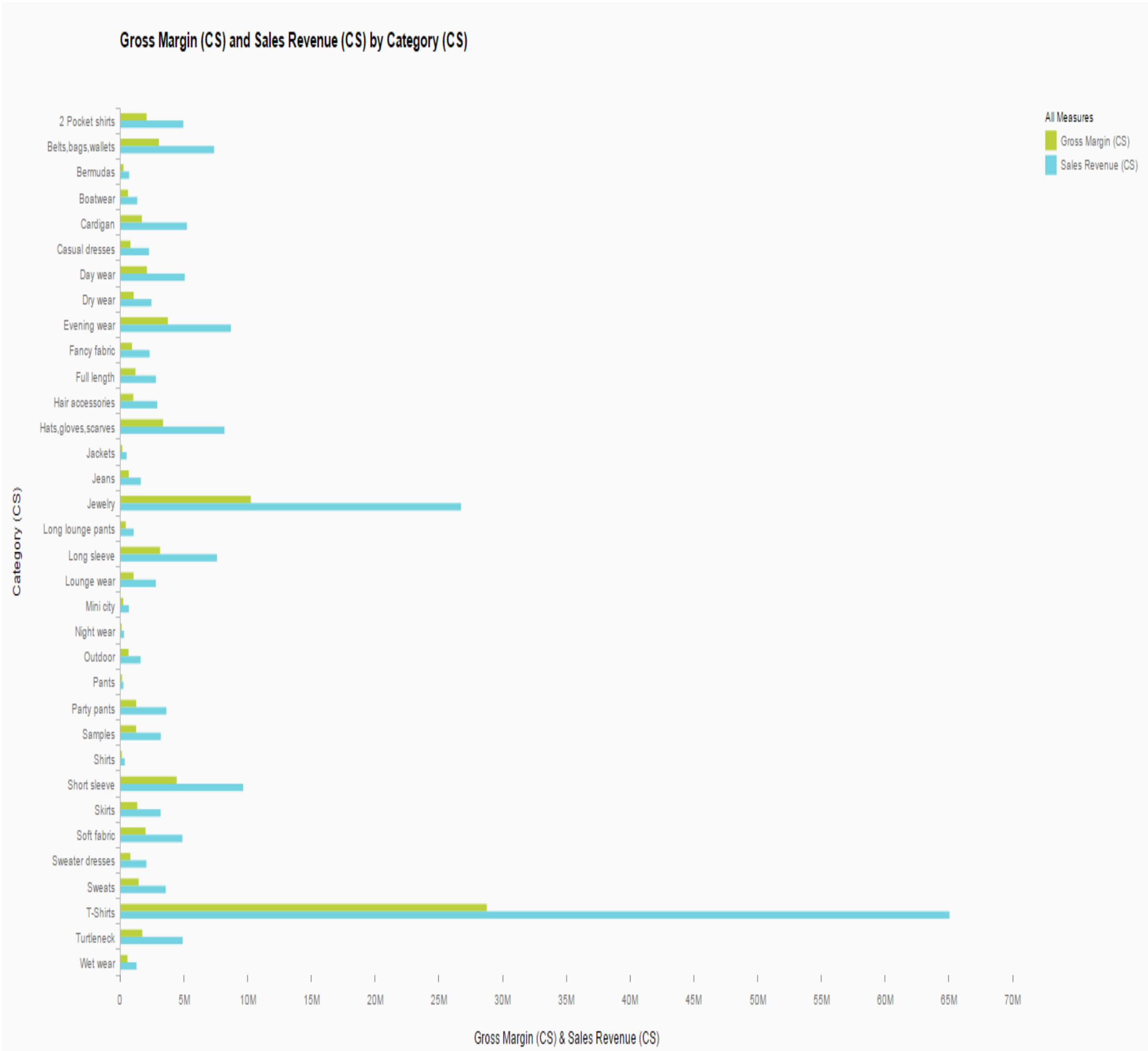
The most important statistic for introducing the Customer Satisfaction dataset is, of course, the customer satisfaction measure, which is scored as a decimal out of 1.00. Additionally, number of issues reported were included to give greater insight into how each manager performed. An interesting trend was noted in the above visualization: the amount of customer satisfaction seemed to be somewhat correlated with number of issues reported. Generally, however, the greater the satisfaction, the greater the spread between satisfaction and issues grew, as seen for Lia Armand, Sarah Am, and James Frank. That being said, Ellen Grey was a notable outlier, having more issues reported than customer satisfaction. Upper management should respond according to these trends.



The above KPI tracks the relative buying patterns of different products in the United States. It will be used to evaluate the varying amounts of customer satisfaction. According to the visualization, the most popular products are long sleeve shirts, sweats, and day wear. Although each of the managers has been tracked with regards to customer satisfaction, the product offerings will be examined to determine if there are any outliers and if discounts affect the amount of satisfaction.



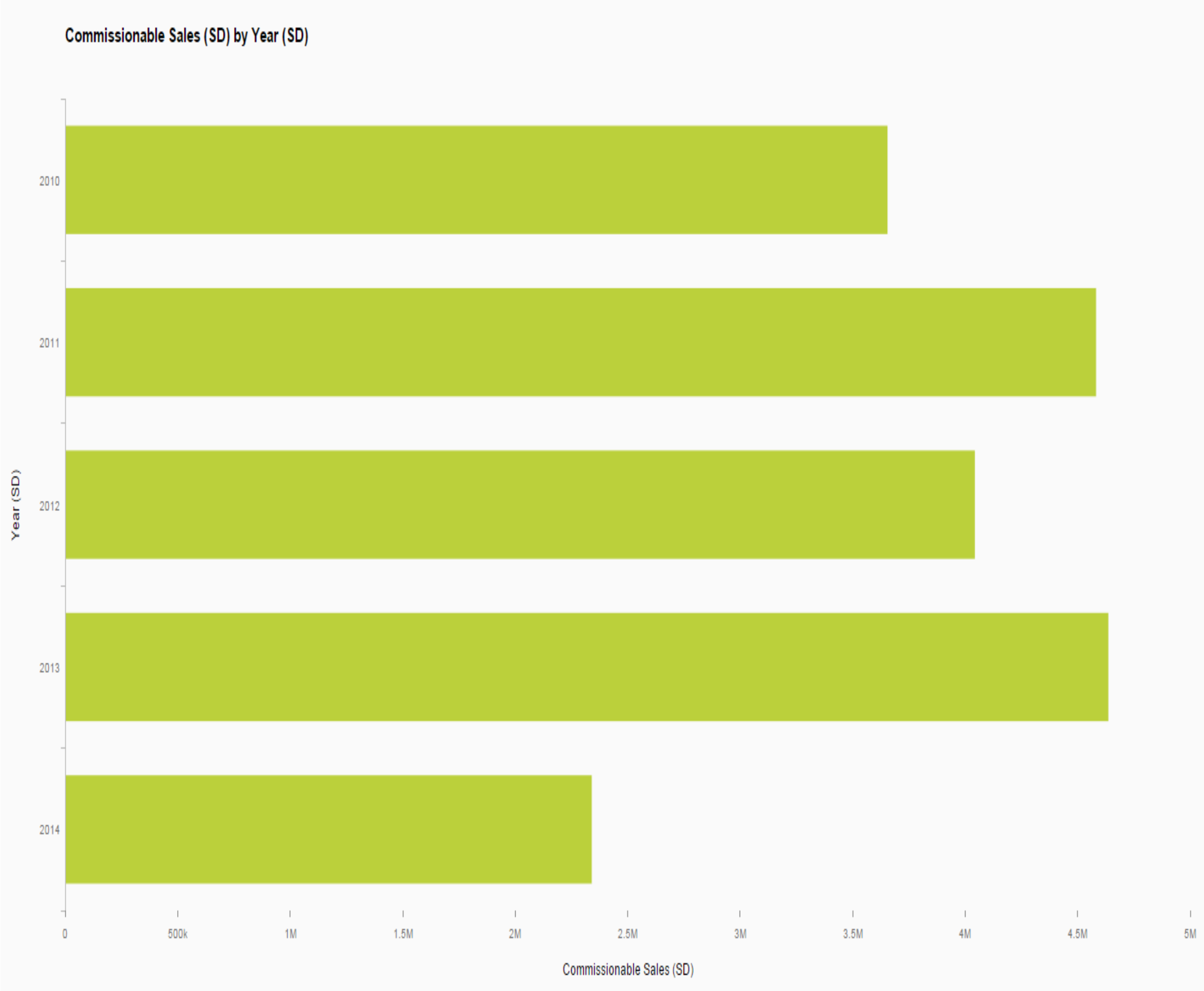
As shown in the above scatter plot, there is no significant correlation between discounts and customer satisfaction, which should be considered by marketing in the future. That being said, T-shirts had massive discounts while still managing to be at the end of the distribution. However, hats, gloves, and scarves had a large amount of satisfaction without any significant discounts. With moderate discounts, jewelry only managed to reach the end of the major distribution. Next, gross margins and revenues will be analyzed to determine which of the products are generating the most cash flows.



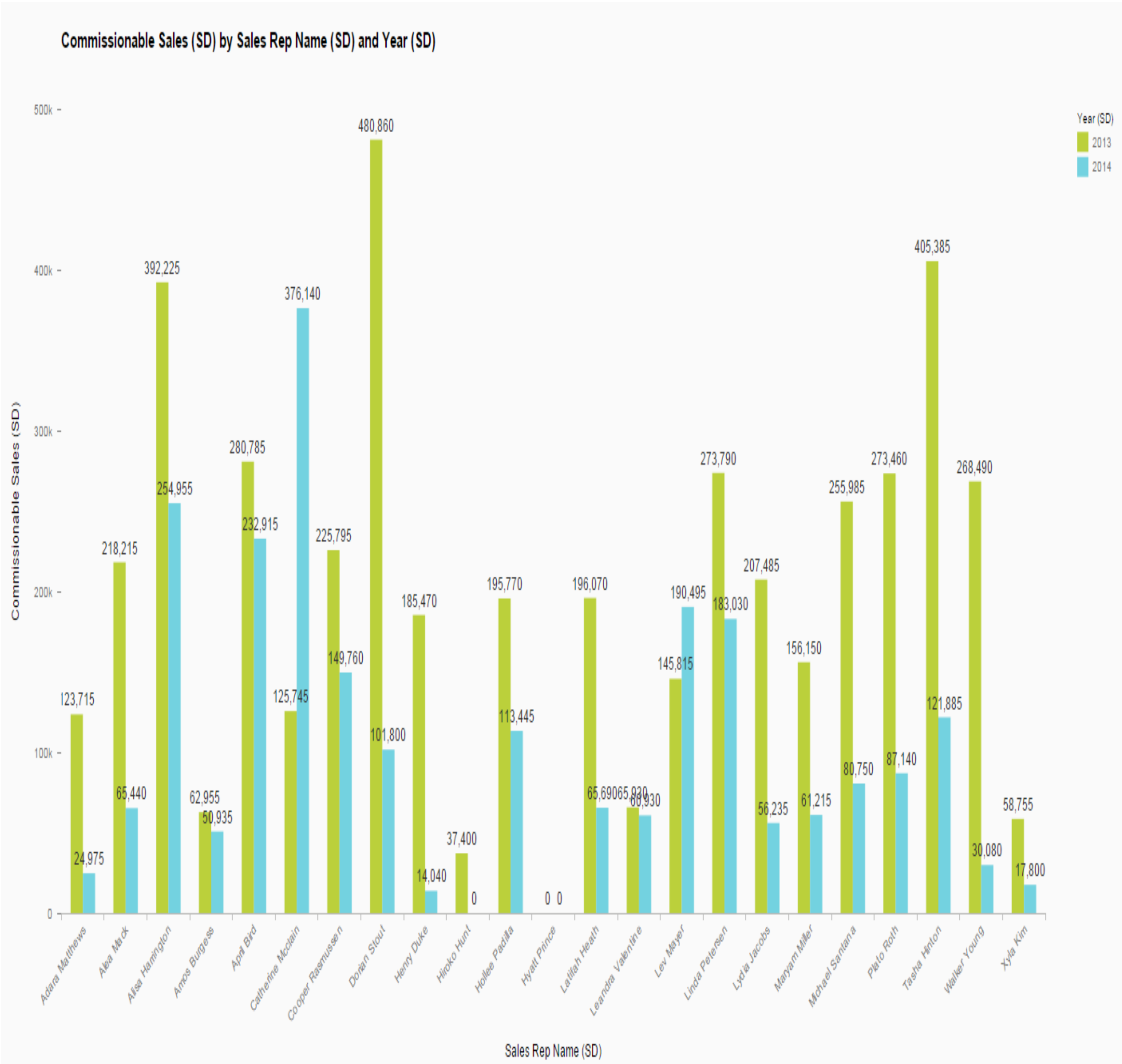
Several interesting conclusions can be drawn from the above KPI. For starters, while hats, gloves, and scarves had the highest amount of customer satisfaction, they did not, in fact, contribute much revenue to the company. Additionally, the gross margin for most of the products seemed to hover around 50 percent. That being said, the company's policy of T-Shirt discount seems to have paid off: T-Shirts produced the majority of revenue for the company. Although many of the products with higher customer satisfaction did not produce a significantly larger amount of revenue, the company should still make a concerted effort to keep satisfaction high in order to retain existing customers.

Sales Data

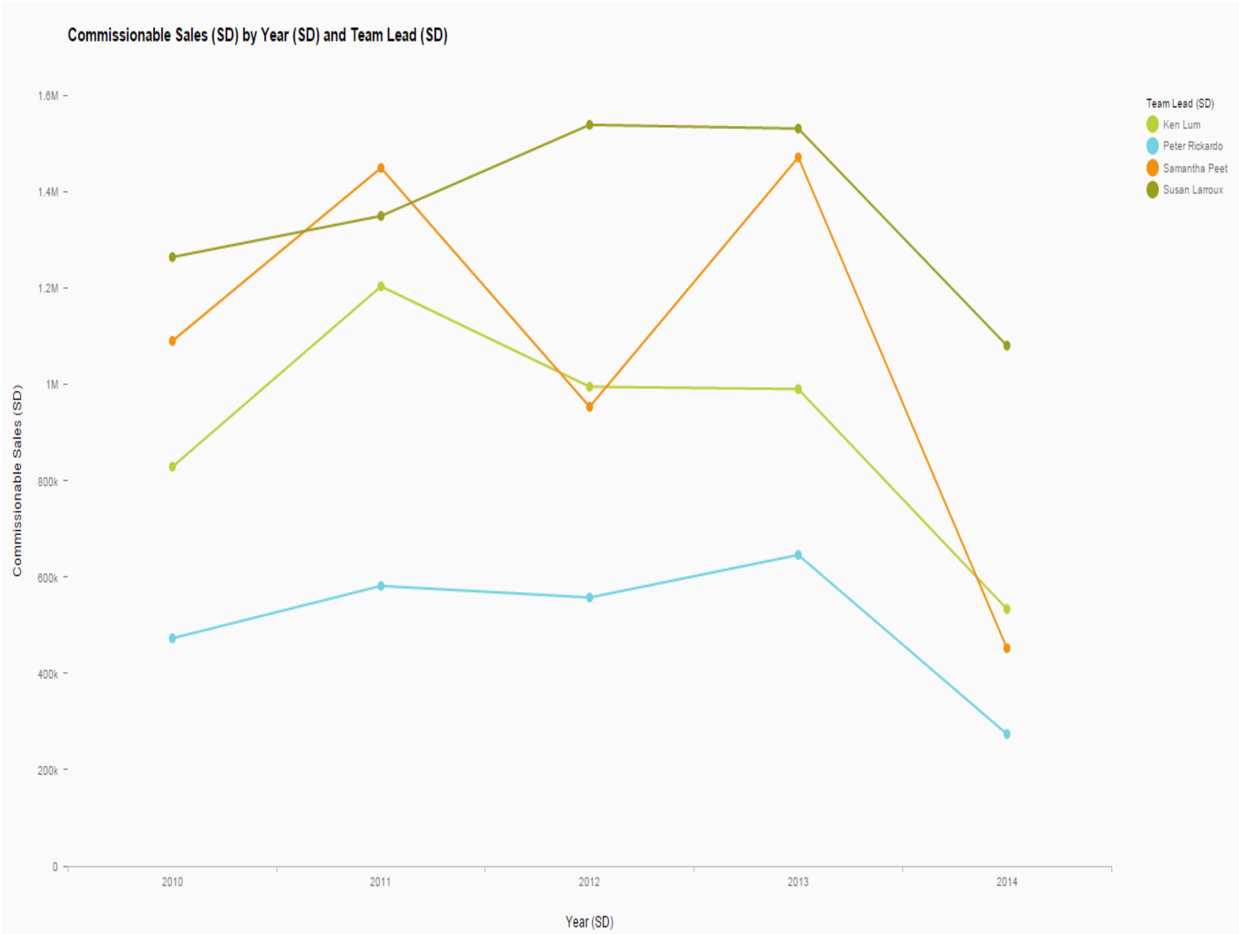
There are two key metrics for evaluating the effectiveness of the company's sales force. First, the entire sales forces should be observed on a yearly basis to determine the overall trends. Afterwards, each individual salesperson's total sales commissions should be analyzed to point out the top performers and the lowest performers.



As shown above, the amount of commissions earned by the entire sales force decreased by nearly half following 2013. However, it should also be noted that the commissions bounced back after the drop in 2012. The drop in commissions is likely a result of the increased prevalence and ease of access in online retail. The company should react by either increasing its online presence or by acquiring more experienced salespeople. Next, the breakdown by individual salespeople will be observed if there are any outliers dragging the trend downward.



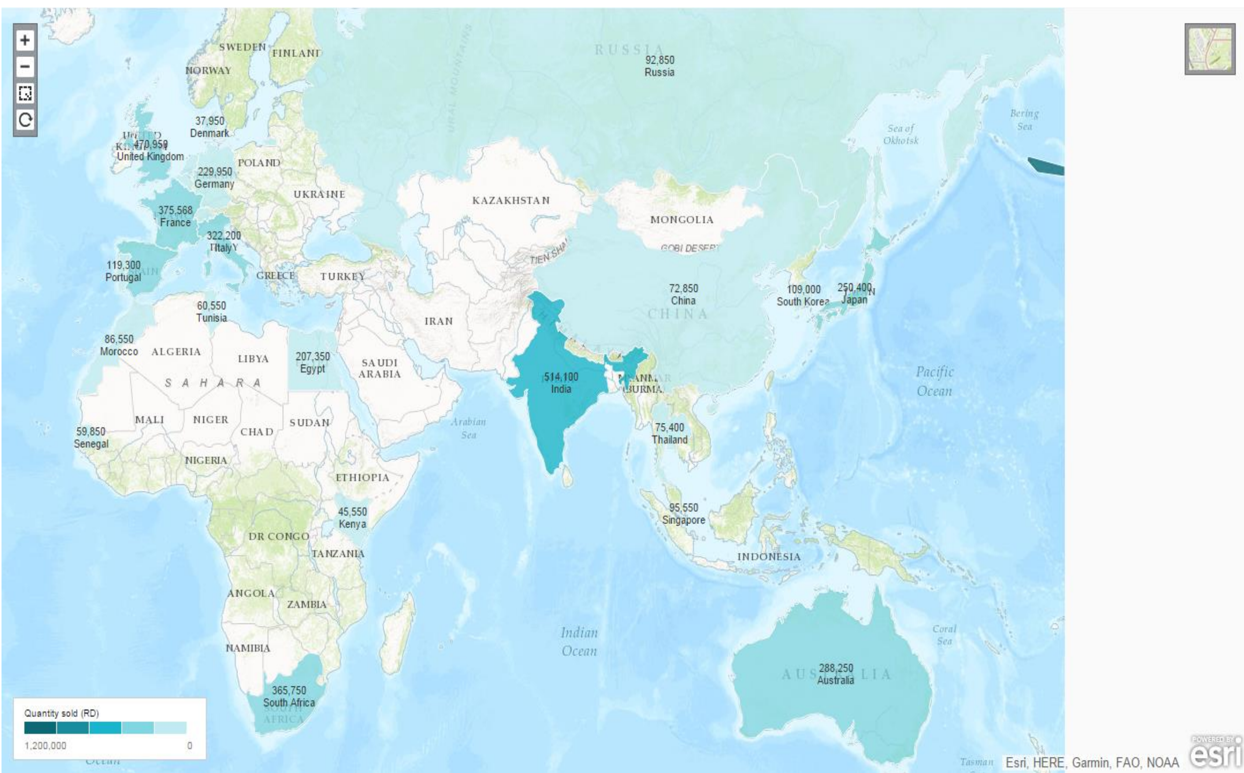
As evidenced by the above shown trend, it is highly unlikely that the reduction in total sales commissions is the fault of the sales forces. It was more than likely caused by disruptive market trends that the firm was not prepared for. However, there were two salespeople that actually managed to increase their commissions. McClain’s commissions more than doubled, going from $125,745 to $376,140. Mayer’s commissions also increased by a small amount. Management should carefully evaluate the performance of these two and compare it to the other salespeople in order to optimize its overall sales practices.



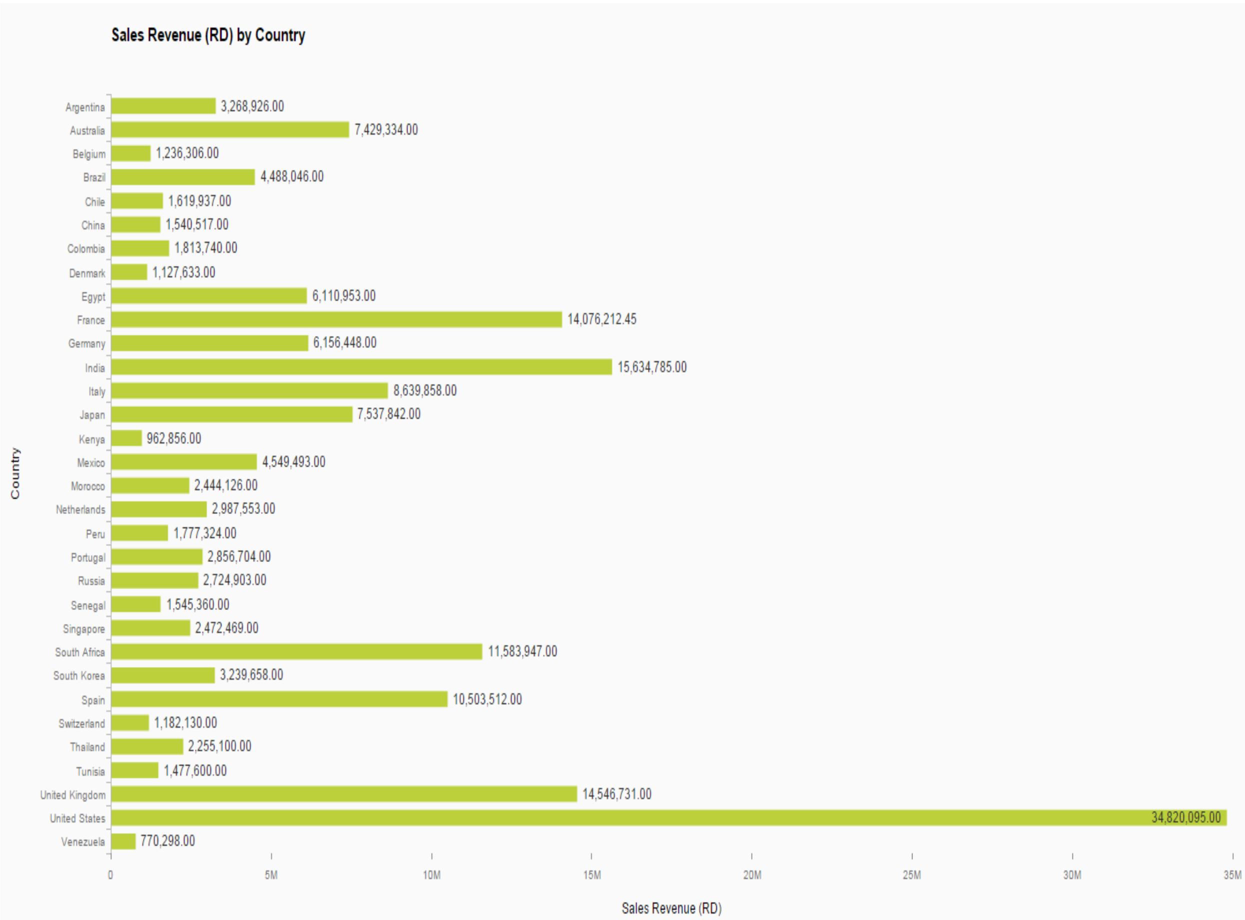
To finalize the analysis of the sales data, each individual team lead's unit will be examined. Peet's unit has consistently been volatile throughout the five year period. Meanwhile, Larroux has been a constant top performer. Peet did overtake Larroux in 2011 but it followed in 2012 with a sharp loss in commissions. Peet's slope from 2013 to 2014 was also sharper than the other leads. Peet's unit should be examined to determine what exactly is causing its commissions to fluctuate so wildly in comparison to the other units. Larroux's group will likely serve as an example to how the other groups should be performing, in terms of raw commissions.

Retail Data

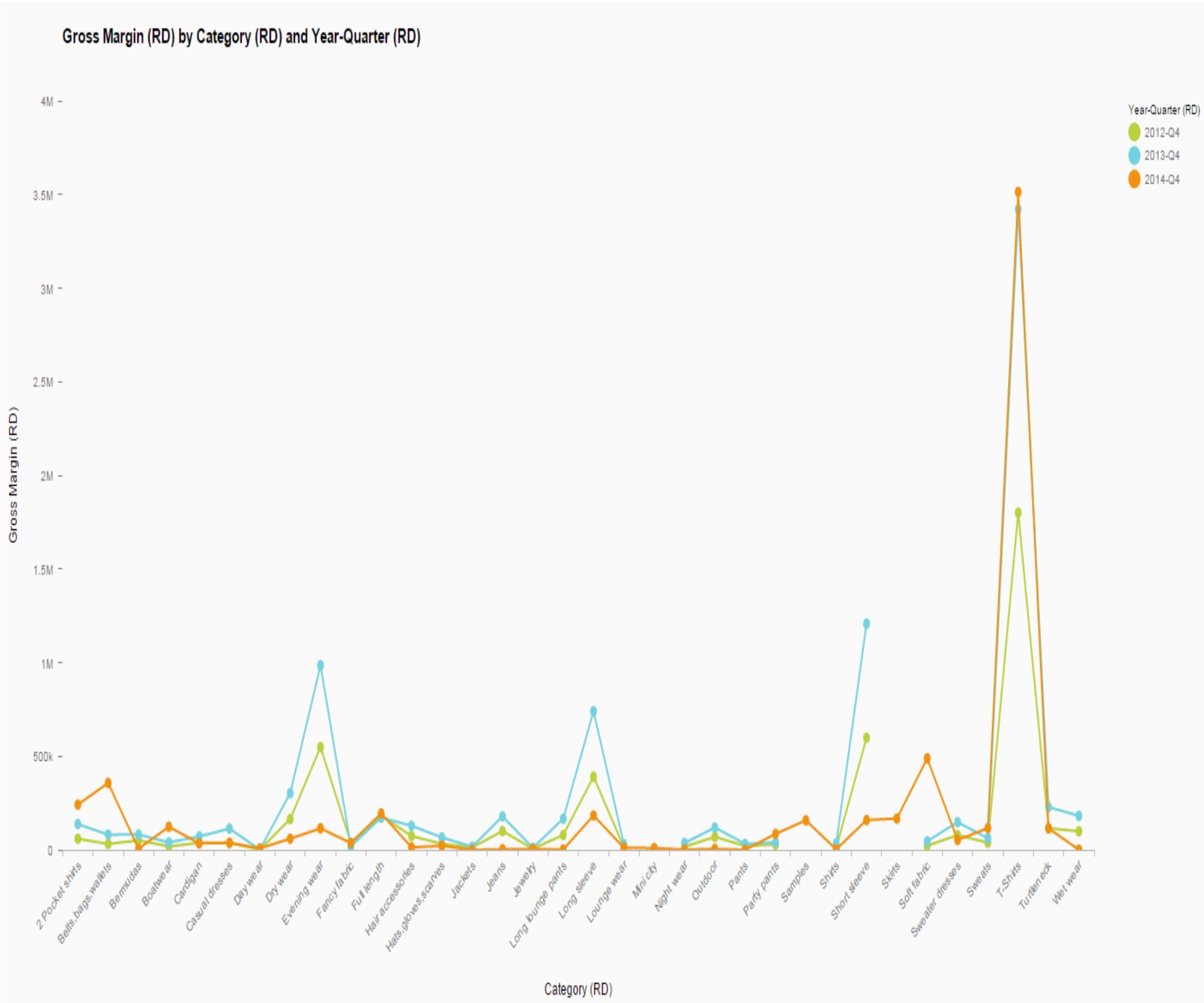
Although there is much overlap in terms of the available data between the Retail Data set and the Customer Satisfaction set, the focus will be much different for Retail Data. First, a Geospatial visualization will be utilized to examine where the top areas of focus should be for the company, as well as where new efforts should be focused.



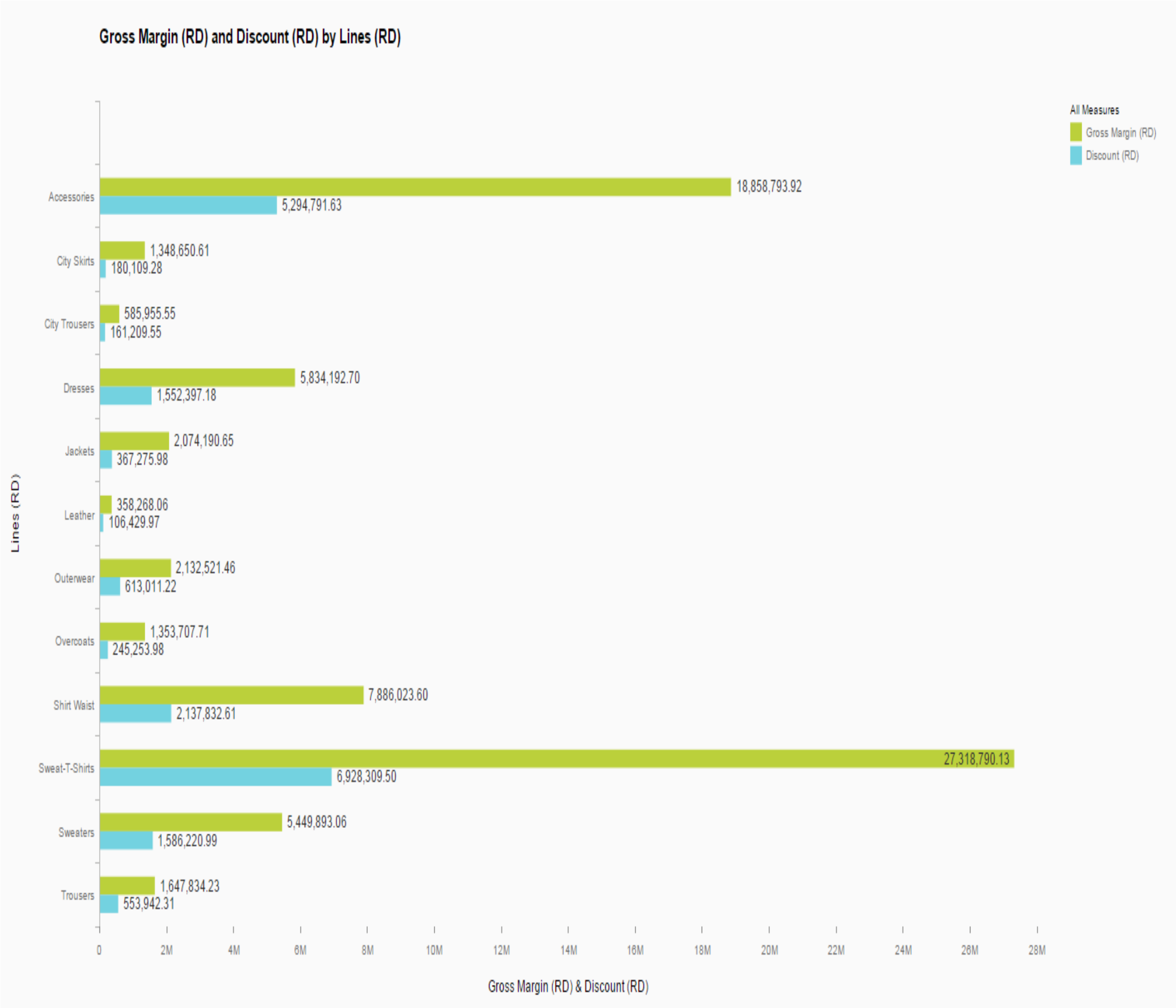
Naturally, the United States proved to be the greatest consumer of the company's goods. However, there were several interesting trends. Both the Indian and South African markets appear to be notable outliers in their given regions. Additionally, the Australian and European markets remain strong. China, despite being a massive potential market, was not a significant consumer. Efforts should be made to improve sales in the Chinese market: doing so could result in many new profits. Additionally, India, the other massive emerging market, should also be focused upon. Japan also generated a great number of sales, as well. The numbers generated by South America and Central America are underperforming relative to other regions. Perhaps different strategies are needed or the markets need more time to develop.



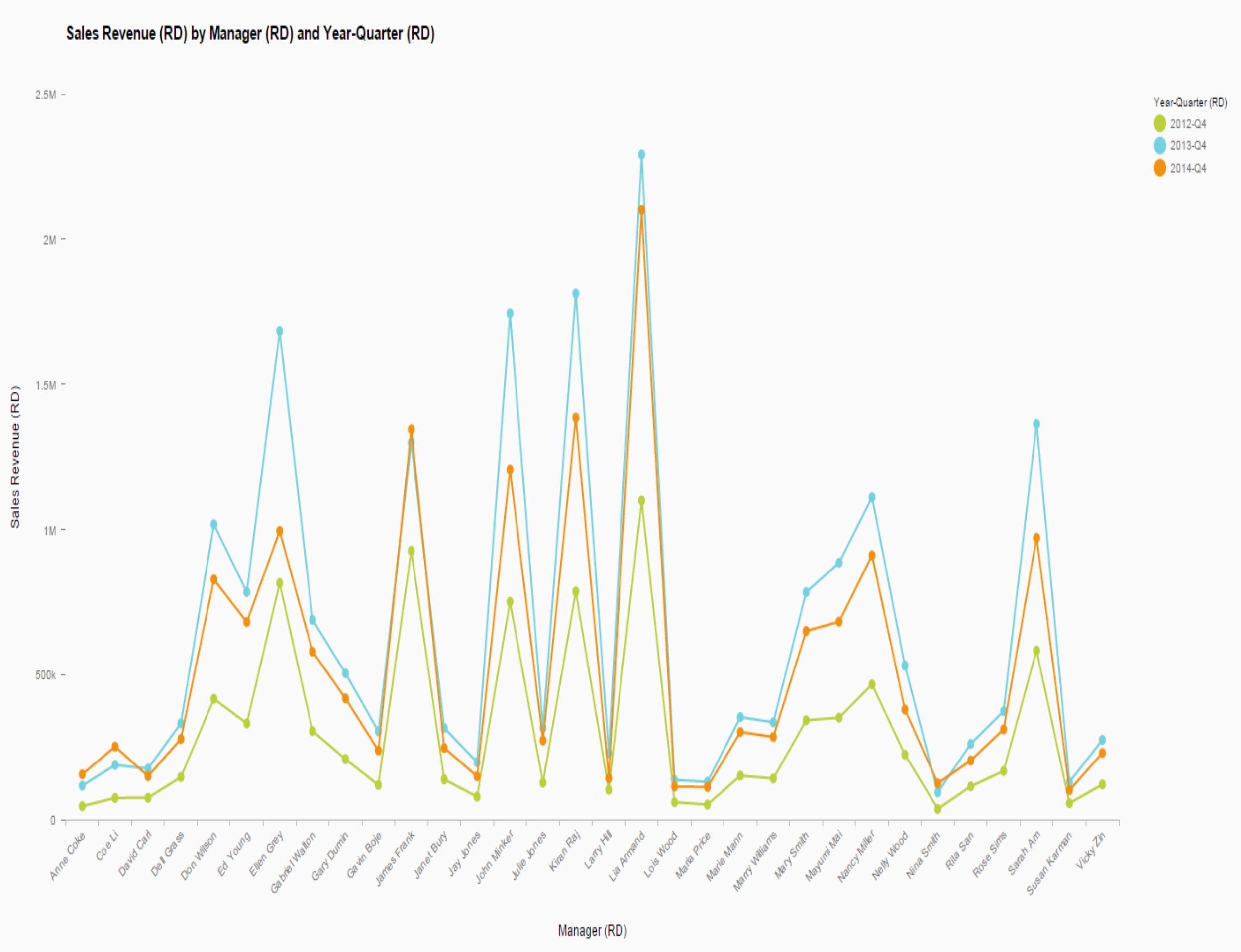
Although examining the quantity sold is imperative, revenues are the lifeblood of any firm. As such, it is revealed through the KPI above that the US, UK, India, and France were the greatest contributors to the firm's total revenues. As such, the company should seek to continue capitalizing on these markets while also aiming to bring up the laggards, such as China and Germany. Next, the gross margin of each product offering will be analyzed to determine which of the products are contributing positively to the bottom line.



In determining where the company should concert its efforts in retailing, the gross margins of each product are displayed in the above KPI. As mentioned in the customer satisfaction section, T-Shirts are, far and away, the most profitable for the company. Interestingly, many of the products trended downward in 2014, with the exception of T-Shirts. Additionally, there several products that were not offered prior to 2014, which could eventually lead to increased profits for the company. Online retailing, however, remains a significant threat to the company's retail chains. As such, efforts should be made to remain competitive with the likes of online giants, such as Amazon.



Discount offerings are a key part of increasing sales revenue and, by extension, gross margins. In looking at each line, the amount of discounts definitely seemed to have a relationship with regards to gross margins. However, it is unclear in the dataset if this is due to the fact that the discounts offered was higher or if the sheer total of discounts increased due to sales volumes. If it is the former, then the company should offer more discounts to bring up the lower grossing products. Discounts seemed to have a high correlation with gross margin in the above graphic. To conclude the discussion of the Retail Data, the performance of each manager will be tracked.



The gap in performance over the years has been rather volatile. Following 2012, all of the mangers experienced an increase in sales revenues. It is possible that shifting economic conditions caused the increase in consumer demand. However, performance decreased notably in 2014. It was already determined earlier that Armand generated the greatest customer satisfaction; the sales revenue figures prove that her unit is the best in the company. Her unit should be cross-referenced with the others to determine what she is doing to differentiate. Additionally, more research should be done in order to circulate any other variables that may be skewing the figures in favor of her, such as higher concentrations of potential buyers.

Conclusion

Following careful examination of the data, the company has excelled in certain areas regarding sales and customer satisfaction. However, the emergence of online retail has had a notable impact on the company's retail activity. In order to remain competitive, the company must either look into branching further into online offerings or providing superior service and product offerings than its online counterparts.