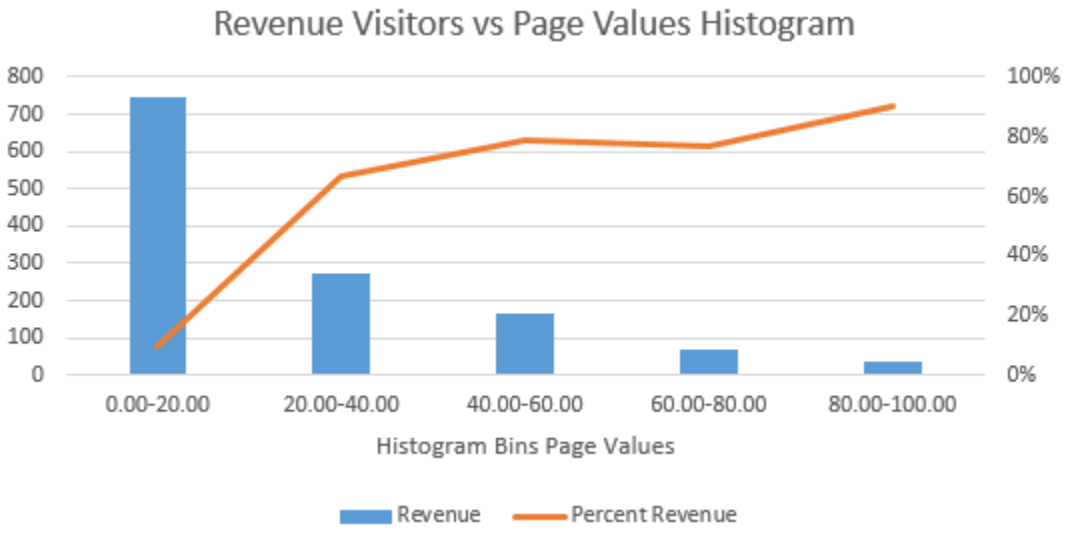
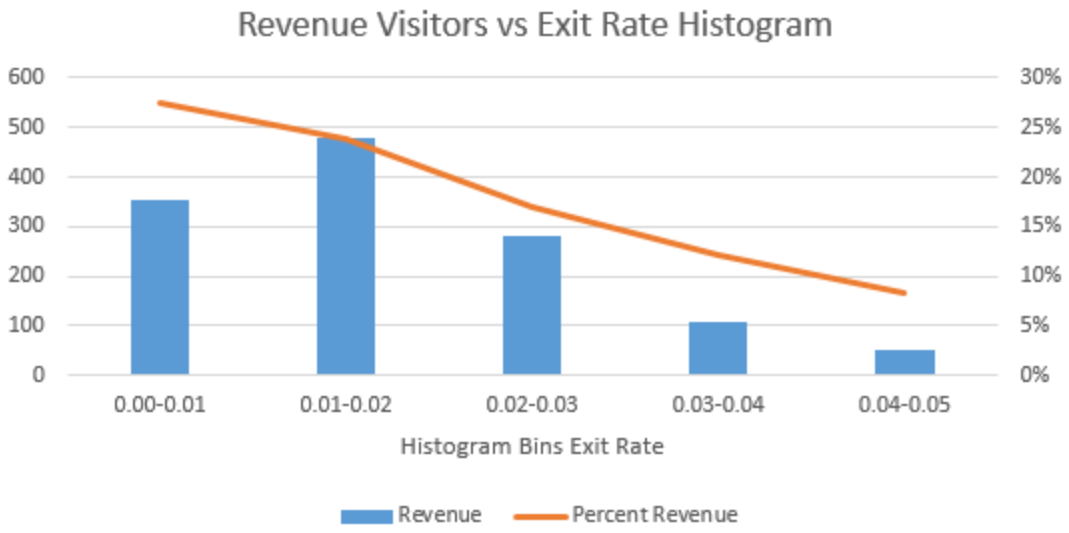
Some findings from Exploratory Data Analysis:

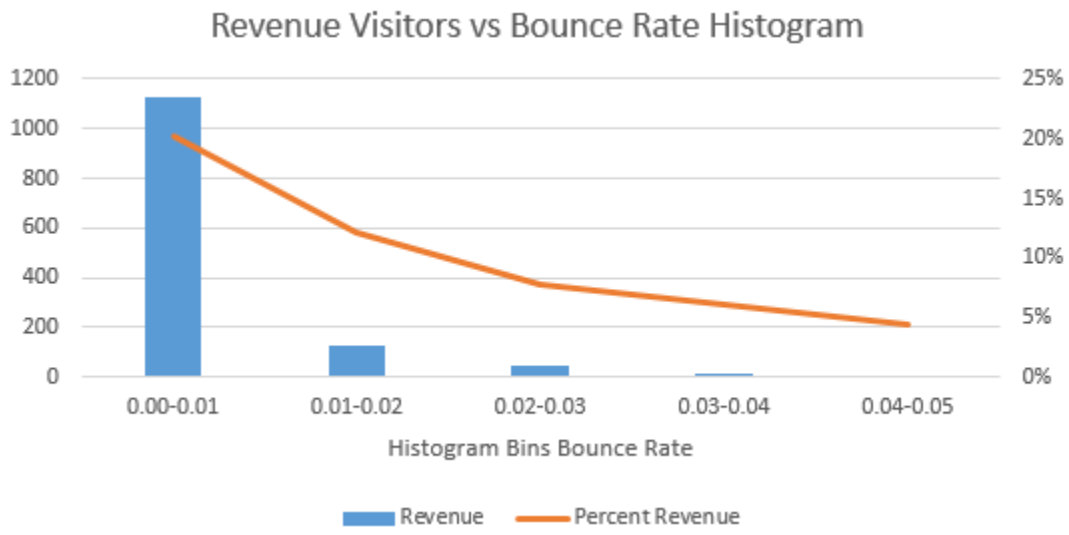
1. Effect of the Number of Jewelry Pages visited:
   On an average, only 15% of the visitors to the website make a purchase. On plotting the percentage of revenue generating visitors vs the number of jewelry pages they visit, it is clear that those customers who visit more than 20 pages, make purchases at a significantly higher rate than customers who visit less than 20 pages.
   This suggests that if the website is made appealing for people to stay and browse jewelry pages, people might buy more. This is a correlation and might not mean causation, i.e. those visitors who eventually buy might be spending more time on jewelry pages. However, one can do an experimental design and test the hypothesis that appealing webpages make people stay more and eventually buy more as well.



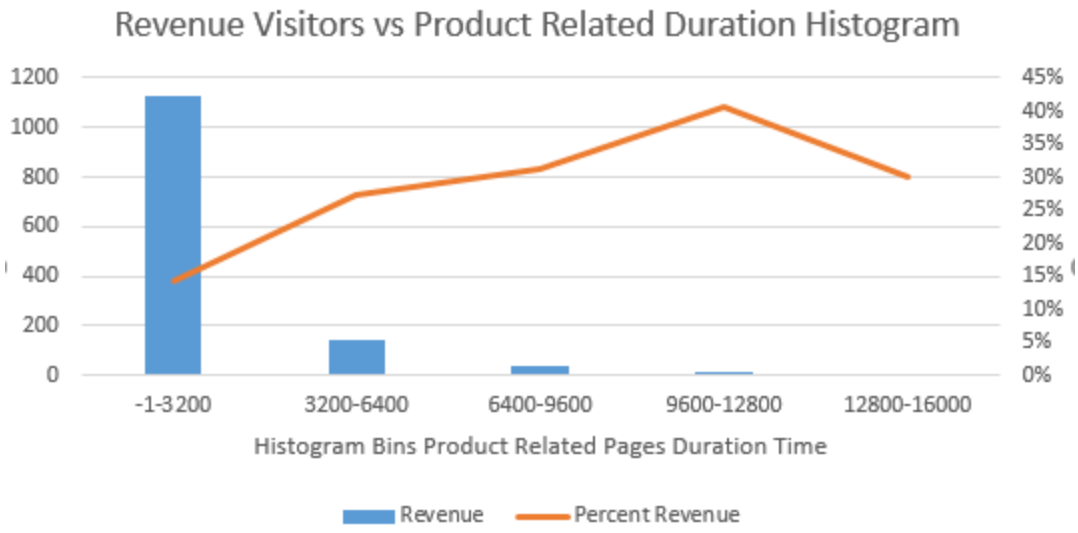
2. Exit Rate:
   As exit rate increases, fewer and fewer percentages of visitors make a purchase. So, if the exit rate can be kept low, preferably below 0.01, more people might make a purchase. (Correlation and not causation)



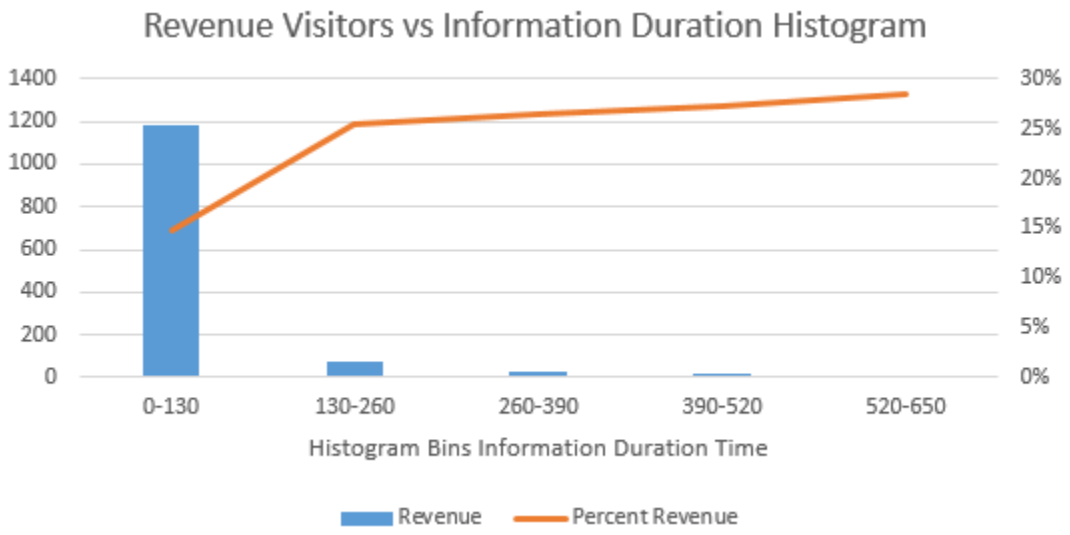
3. Bounce Rate:
   It also seems to have the same correlation with conversion rate as the exit rate, a lower bounce rate leads to higher percentage of people making a purchase.



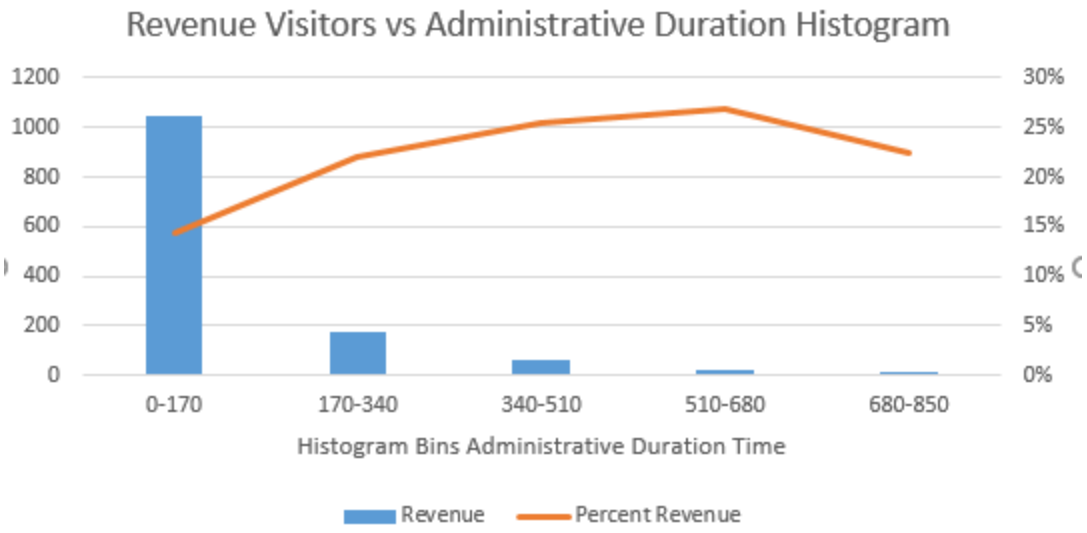
4. Time spent on product related pages:
   Those who seem to spend more time on product related pages seem have a higher conversion rate. Again, this is a correlation and therefore does not mean causation. We could do experimental design to test for causation.



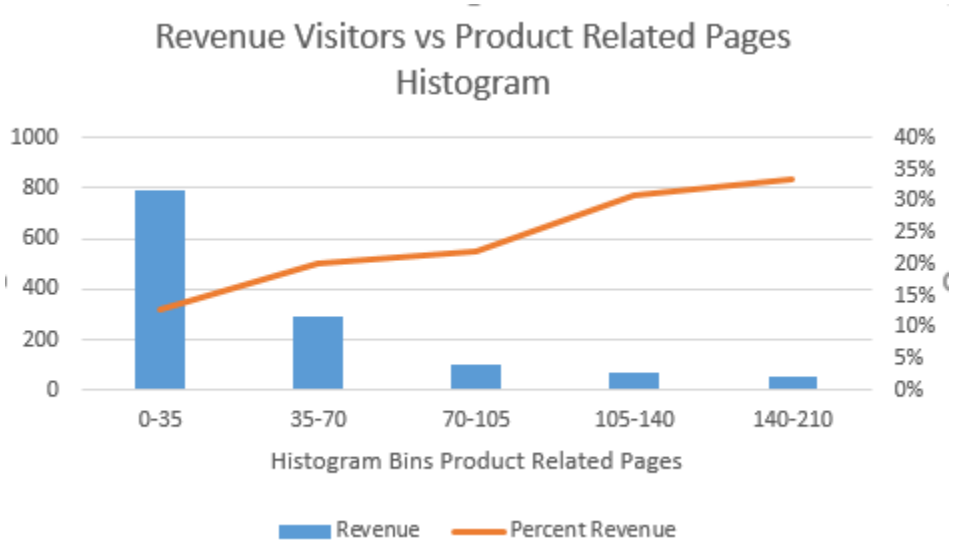
5. Time spent on Informational Pages:
   It is positively correlated with conversion rate.



6. Administrative Duration:
   It is positively correlated with conversion rate in the range where most observations lie.



7. Product Related Pages:
   The more number of product related pages that visitors see, the more they tend to buy.



8. Number of Administrative Pages visited:

   It seems that this does not correlate with conversion rate. However, those visitors who do not visit administrative pages at all, buy at a significantly lower rate than those who visit one or more pages.

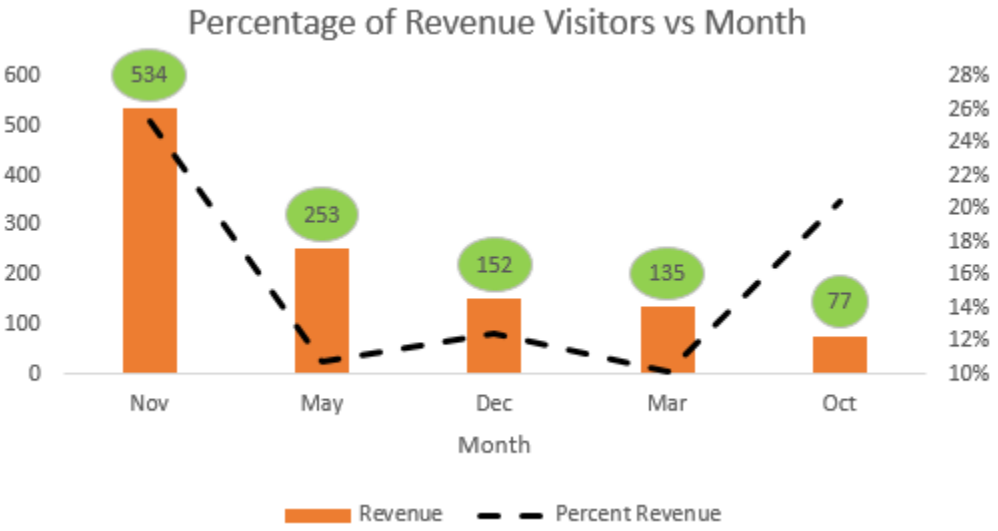
9. Number of Informational Pages visited:

   This correlates positively with the conversion rate.

10. Closeness to a special day:
    It might be counter intuitive, but closeness of the day of visit to a special day results in lower conversion rate. This of course depends on how we define the degree of closeness but if 0 means that the day of visit is far from the special day and 1 means that the day of visit is on the special day, then there seems to be negative correlation.

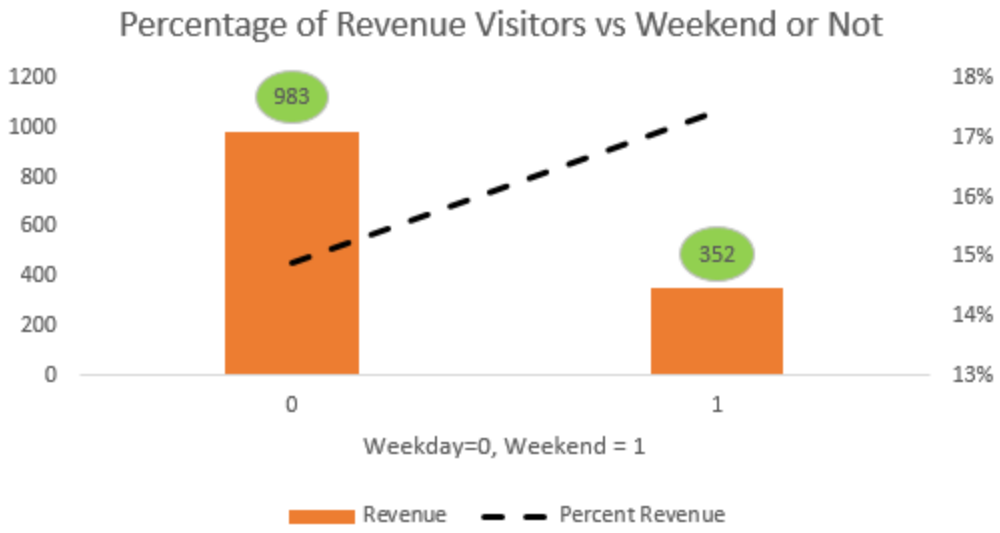
11. Month of visit:

    November seems to be the month having the highest conversion rate. This store can use this observation to sell more during this month, i.e. try channeling more traffic to the website during November and see whether it results in even higher sales.

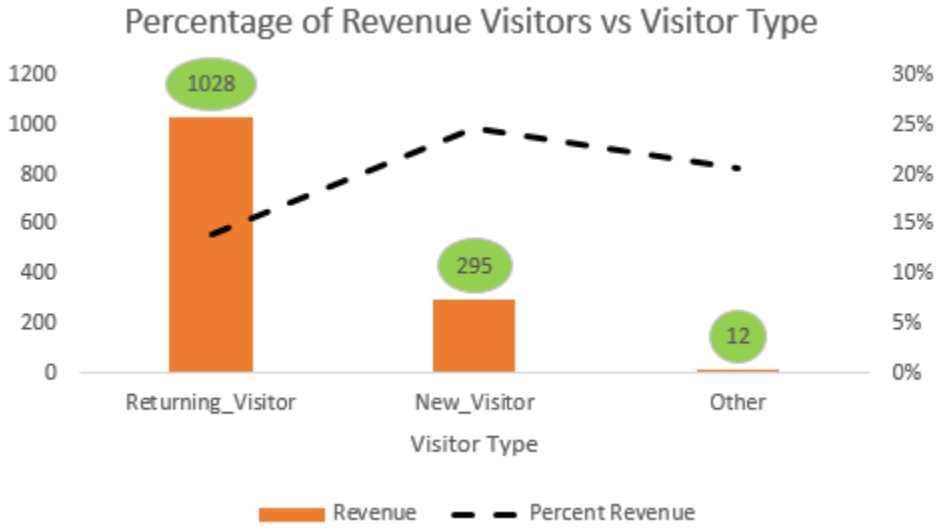


12. Weekend:

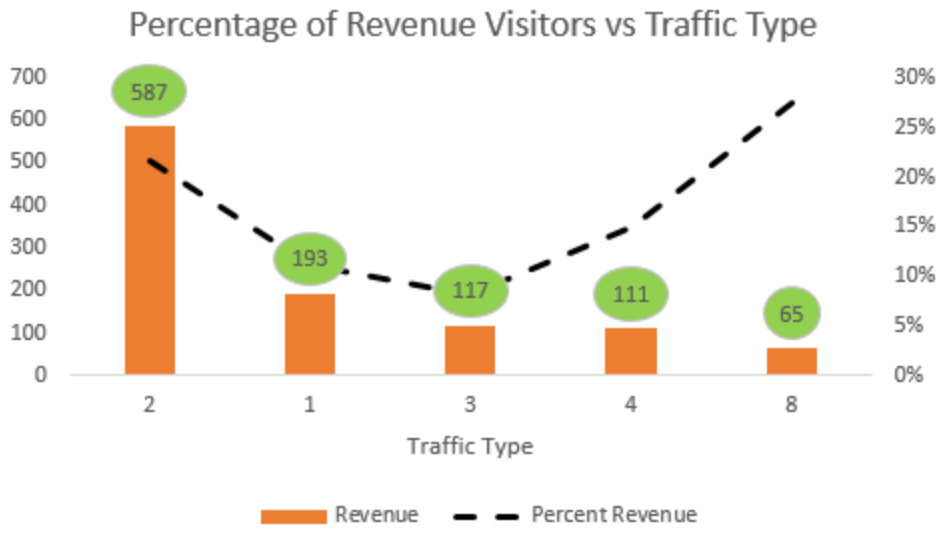
    Weekends seem to result in higher conversion rates.



13. Visitor Type:
    New visitors result in more visitor to sales conversions than returning visitors.

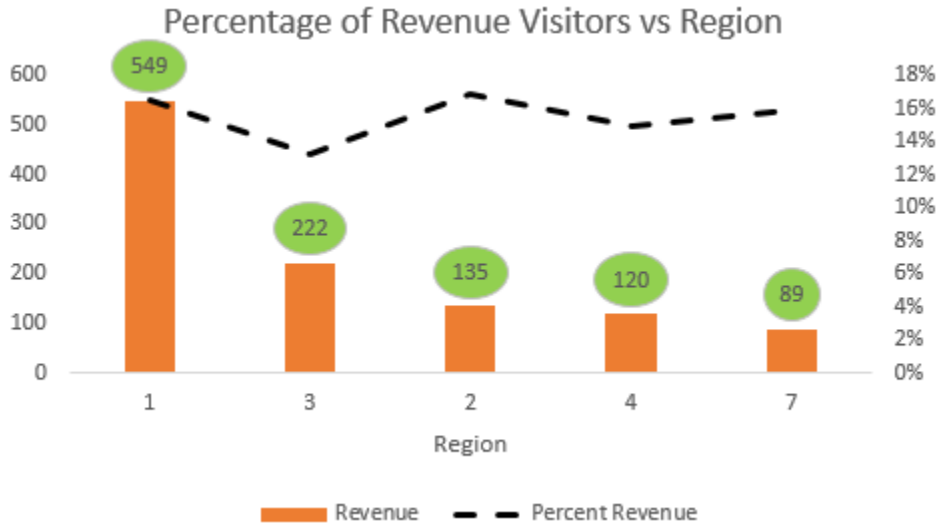


14. Traffic Type:
    Traffic of Type 2 results in the highest conversion rates. The store can find out why this is so and see if other traffic can also be converted to type 2 or if it is something that cannot be changed.



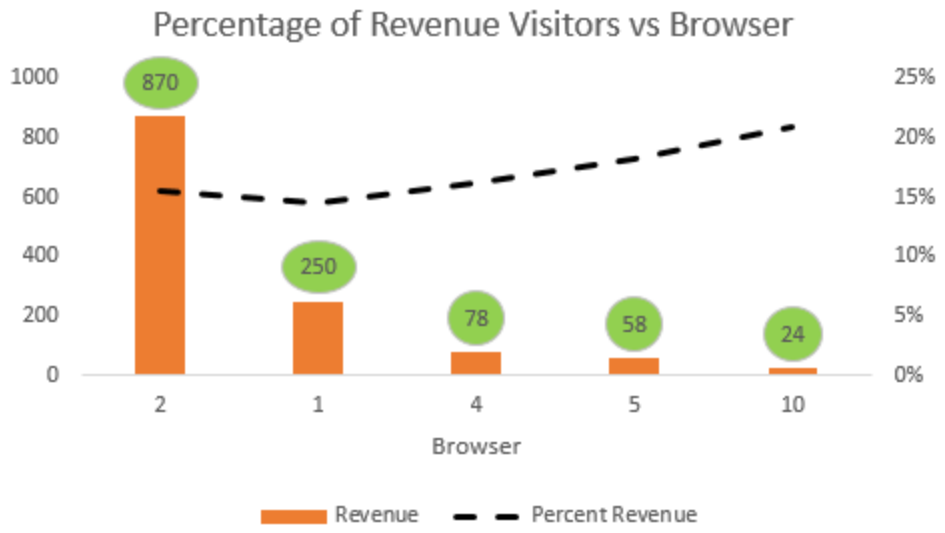
15. Region:

This does have any effect on conversion rates. So region based marketing might not be helpful in this case.



16. Browser:

Most buyers seem to use Browser 2 but the type of browser does not seem to have any correlation with conversion rates.



17. Operating System: While Operating Systems 1 and 2 account for most revenue generating visitors, there is no correlation with the OS either.