**INTRODUCTION**

This is a data analysis presentation, made to tackle the various variables presented in the sets of data provided by the organization, ranging from 2015-2016.

The sets of data from two different workbooks ([Clean Customer Sales Data Set](https://learn.snhu.edu/content/enforced/1510737-QSO-560-X3347-OL-TRAD-GR.24TW3/Course%20Documents/QSO%20560%20Clean%20Customer%20Sales%20Data%20Set.xlsx?ou=1510737) and [Customer Sales Data Set With Region](https://learn.snhu.edu/content/enforced/1510737-QSO-560-X3347-OL-TRAD-GR.24TW3/Course%20Documents/QSO%20560%20Customer%20Sales%20Data%20Set%20With%20Region.xlsx?ou=1510737)) were merged to give a complete workbook i. e the region from one workbook was used to replace the household income cell in the [Clean Customer Sales Data Set](https://learn.snhu.edu/content/enforced/1510737-QSO-560-X3347-OL-TRAD-GR.24TW3/Course%20Documents/QSO%20560%20Clean%20Customer%20Sales%20Data%20Set.xlsx?ou=1510737). The date column was formatted to the right date settings of an excel document and was filtered. Also, the cells with headings were filtered to help in the discovery of the various blanks in each column. The blank cells were deleted to give a complete document.

A pivot table and pivot graph are used for the analysis of the variables presented in the set of data that was given by the organization.

**OBSERVATION**

* The average order total for CAFÉ, showed major sales in the DINE-IN section 18.18226602 on average sales. The CARTERES made more sales from the CARRYOUT and DELIVERY section of 15.9835278 and 16.62339139 respectively. GREEK AND ITALIAN RESTAURANT made zero sales from their delivery section, this shows that many of the individuals in that area prefer to either DINE-IN or CARRYOUT their food or snacks from the restaurant. CAFÉ made a good annual average sale of 16.96586059 from 2015-2016 which was the best so far from all 16 restaurant categories.

From the first two pivot graph for the average order total, it shows that further splitting of the data variables into three variables under delivery, dine in and carryout, it gave an insight on the order type for each restaurant category that brought about increase and decrease in sales.

* From the set of data from each region and order type, it was deduced that the DINE-IN section accumulated more sales in the MIDWEST and SOUTH region of the organization. The NORTHEAST region customers preferred the option of DELIVERY and made average sales of 14.67118011. the WESTERN region made average sales of 14.16029216 from the year 2015-2016.
* The CAFÉ made the best average annual sale of 16.96586059 between 2015 and 2016 in all the four regions of MIDWEST, NORTHEAST, SOUTH and WEST. DELIS AND DELICATESSENS had lower average annual sales between the year of 2015 and 2016 but had the best sales in the WESTERN region, which accumulated to 16.15189418 on average.

Analyzing both data from every region based on their order type and restaurant categories helped in actualizing the various areas which needs more hands or the removal of such order type or closure of the restaurant in that region.

**CONCLUSION**

The set of data gotten from the restaurants in the four regions of the USA helped in fishing out the restaurants which lack in their various departments like the delivery department in the greek and Italian restaurant that made zero annual sales requires the department to be closed down as the people in that region prefers to eater dine in or take their food out. Also, Cajun/creole restaurant made low average annual sales in their delivery section, this shows that the customers also prefers to dine in. Departments lacking in sales should have their funds either cut down or removed totally and focused on the other departments.

When looking into the various regions and their order type, we can deduce that the western region made lower annual average sales when taking on delivery of food to their customers. Further splitting the regions to get to know the restaurants which made lower annual delivery sales, it can be seen that seafood restaurant western branch made a drastic lower annual average sale.

**RECOMMENDATION**

Adverts are proposed for the regions shown on the average annual sales graphs, the benefits of choosing the restaurant’s delivery section which is really lacking in sales. Also, fast delivery options like bikes that can overcome traffics and respond to the various orders placed on time.

The analysis of these variables using the regions of the various restaurants helped narrow down the analysis into a simpler and understandable plots which can be read and understood by a layman.

THANK YOU