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Python for Business Analytics

Professor John Droescher

Final project report

The Business problem statement is Business suggestions for the success of a newly opened pizza restaurant. After thinking what could show and the trends and discover business opportunities, I decided that I will look at quantity of sales over different form of time, and the relationship between the best-selling pizza types/categories and the time and season. Thanks to the colleagues and professor, I also made adjustments from their suggestions.

For this analysis, I use the data for the pizza restaurant in the SQL server, I extracted the data using inner join to get all the corresponding orders and rows in one bigger table and then extracted the table into a csv file with the columns I need only. For all the visualizations, I used Tableau and import the above csv file into Tableau as the dataset.

* I identify the pattern of the Busiest hours are 12PM – 1PM especially Mon- Fri, then followed by 4PM – 6PM, and 7pm- 8pm on Fri-Sat. Order start to come in at 11AM and very little after 11PM. I then investigated why some weeks there are significant higher and lower sales; and discovered that during major holidays, student recess, and sport events there are more sales, and natural disasters will of course reduce sales for a period of time. Then it was discovered that the XXL size option was selling poorly over time, and that even though the classic category is the only XL size type of pizza selling but it has a good number of sales considering its price. The small classic pizzas are the leading sellers ahead of any other sizes and category, and the large pizzas are the best-selling pizzas overall. Best-selling pizzas are big\_meat\_s, cheeses pizzas, chicken pizzas, dlx, Hawaiian\_s, and spicy\_ital\_l. Overall best-selling to worst category ranking is classic, supreme, veggie, and lastly chicken.