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ABC Company

30th November 2022

Bill Nixon

ABC company

Data Analysis on Sandwich making shop

Hi Nixon,

This is final report on analysis of customer purchasing trends and data supplied by the shop. Data of customer arrive time, Gender, age, sandwich type, drinks, chips, cookie, and other factors that contribute to analysis for the month of June 2022 studied. Below are the list documents for reference.

Sandwich case study-mojola.xls

mojola-case study and report.pdf

Documents has summary on which day of the week is the busiest, customer gender and which age category customers are mostly visiting the store, which product is mostly bought with regular toasted sandwich (unique key product).

We are keen on your feedback on the analysis. Kindly let us know for any improvement or suggestions on changes.

Regards,

mojola

Course Code: **INFO 8145**

Course Title: **Diagnostic analysis**

Data Source: **Sandwich case study-mojola**

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Bill Nixon (Supervisor)

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1.0 Executive Summary

The Sandwich making shop's management requires further analysis of customer purchasing trends, so they will be in a strong position to take a decision on which products to pair with each other based on the key products provided. Post further analysis of purchasing trends data the firm wants to prepare a Case Study digital (PDF) report to discuss with the Sandwich Shop Management team. To proceed with the analysis, we have used various formulas, pivot tables and heatmaps to ensure the analysis is clear and understandable to the management team.

Findings and recommendations

The datasets are analysed and cleaned using VLOOKUP's and other formulas to ensure the data are structured for analysing. Using the issues and requirements document we have analysed the findings related to the document and made sure all the findings are completed.

The key reasons are as follows

- The report explains the count of genders and Age range that purchased the unique product from the store and the hour they arrived
- The count of sandwiches and salads purchased with our unique product
- The count of Snacks and drinks purchased with the unique product
- The report provides a market basket analyses on which sandwich, salad, snacks and/or drinks sold well with the unique product.
- The report can lead us through the end point of the results with clear insights on decision making.
- The pivot tables and heatmaps can help us in analysing sandwiches, salad, snacks or drinks that sold well with the unique product

Key contents

- Data model based on the Unique product
- Customer demographic profile
- Other sandwich and salads
- Chips, Cookie, Drinks
- Data Quality
- Documentation

Background of the project

Using checkout data, we have segregated the data into various sheets. Then further calculations are calculated to find the hour of day. Using the data, we can fall into a conclusion of purchasing trends for each customer. Using pivot filters, we have the count of products we used to create our market basket analysis to ensure the management team has a clear view of the results.

Highlights of the project are as follows

- Analysis of customer Genders and Age Range
- Market Basket Analysis of associated Sandwiches and Salad
- Calculate transaction counts and item quantities for related items

- Calculate Support, Confidence and Lift for the water, drinks, chips and cookies

2.0 Statement of Academic Integrity

I confirm that I will comply with the Academic Integrity rules and acknowledge consequences of not doing so.

Acknowledged by

Student Name	Student ID	Authors Unique Initials
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3.0 Conclusion/Summary

Based on the data provided, the issues required to be solved and the analysis done on the data, the following conclusions can be made:

- #4- The Sandwich shop has most of its customers on the 1st day of week with 856 visits.
The 1st day also has most males with 343 males visiting
The shop generally has most unclear customers and few female customers
The 3rd day has the least visits with only 455 visits
- #5- The toasted regular sandwich is best paired with deluxe bought sandwich
The salad best paired is the economy salad
No sales for regular salad
- #6 The shop made most of its sales for drinks/snacks from cookies with 1823 sales and least from bottled water at 811
- #7 The toasted regular sandwich best goes with Cookie for snacks/drinks
Both bottled drinks and chips had a support confidence of 64%