

PROBLEM STATEMENT

To consistently deliver LWB's culinary delights to their valued customers, how can the relevant data be leveraged for the identification and analysis of LWB's key target audience and its characteristics to refine business strategies and better cater to customer preferences and needs?

PROJECT OBJECTIVES AND APPROACHES

Data within visualisations are redacted for confidentiality purposes

CUSTOMER PROFILING

Customer segments identified based on relevant characteristics such as demographics and preferences.

GEOGRAPHICAL ANALYSIS

We identified LWB's customer segments based on their geographic locations through the following methods:



(1) Postal Address (PO) & Street Address (SA) Postal Code

Interactive maps created are able to reflect various useful statistics which are changeable upon clicking on particular district(s).

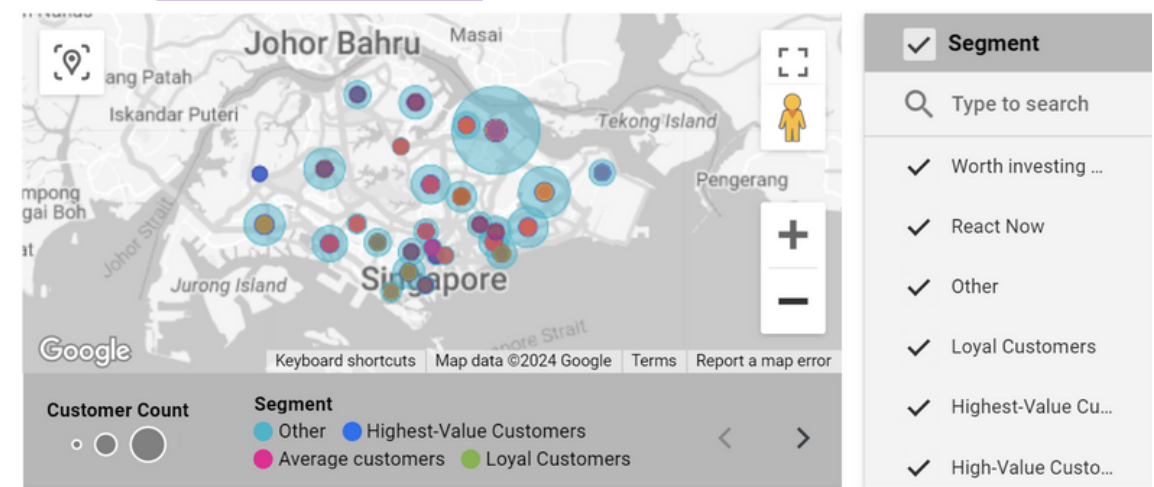
Zone	No. Of Customers	Average Spendings	Total Spendings
north	[Bar]	[Bar]	[Bar]
east	[Bar]	[Bar]	[Bar]
west	[Bar]	[Bar]	[Bar]
central	[Bar]	[Bar]	[Bar]
city	[Bar]	[Bar]	[Bar]
south	[Bar]	[Bar]	[Bar]

(2) Statistical Breakdown by Geographical Region

These geographical region statistics provide key insights into customer numbers and spending patterns across different geographical regions. By examining the data, we can identify both popular and less popular areas.

REGENCY-FREQUENCY-MONETARY (RFM) ANALYSIS

LWB's customers are classified based on their purchase recency, frequency, and total spending, enabling insights on valuable customers and better informed decisions for customer targeting.



CUSTOMER BUYING BEHAVIOURS

Applying analytical techniques to analyse and predict customers' buying patterns.

PRODUCT ANALYSIS

Our team analysed the overall popularity of products through the following methods:

Inventory Item Code	1	2	3	4	5	6	7	8
08BCL001	-	-	-	-	-	-	-	[Red]
01CCL001	[Red]	-	-	-	-	-	-	-
08B3J001	-	-	-	-	-	-	-	[Red]
09BCC001	-	-	-	-	-	-	-	[Red]
08B3G001	-	-	-	-	-	-	-	[Red]
03CCS001	-	-	[Red]	-	-	-	-	-
09BMS001	-	-	-	-	-	-	-	[Red]
06TCL007	-	-	-	-	-	[Red]	-	-
06T3J007	-	-	-	-	-	[Red]	-	-
08BEB001	-	-	-	-	-	-	-	[Red]
06T3G013	-	-	-	-	-	[Red]	-	-
04CMT001	-	-	-	[Red]	-	-	-	-
Grand total	-	-	-	-	-	-	-	-

(1) Ranked by Revenue

Products are divided into separate categories, with its respective inventory item code reflected on the Y-axis. The total revenue of each product category are represented on the X-axis.

(2) Ranked by Frequency of Orders and Quantity Ordered

We grouped products by its item code, and calculated a combined score with different assigned weights; a higher weight is allocated to frequency of orders and a lower weight is allocated to quantity ordered.

Inventory Item Code	Items Ordered	Number of Orders	Combined Score
01CCL001	[Bar]	[Bar]	1
03CCS001	[Bar]	[Bar]	0.56
08BCL001	[Bar]	[Bar]	0.55
01CCL002	[Bar]	[Bar]	0.35
08B3J001	[Bar]	[Bar]	0.33
09BCC001	[Bar]	[Bar]	0.33
08B3G001	[Bar]	[Bar]	0.25
04CMT001	[Bar]	[Bar]	0.25

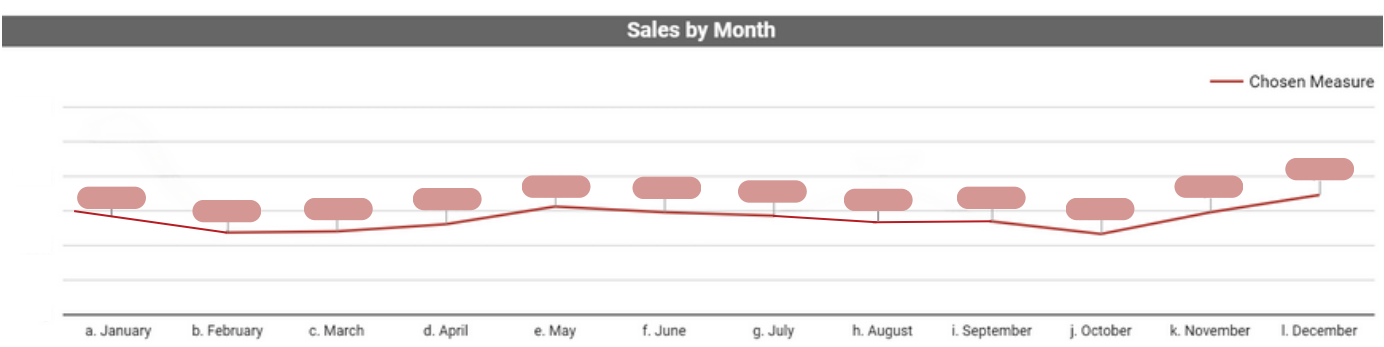
Purchases	Complements
SAMBAL DORY FISH-RAW NON-SPICY OTAH - RAW, FISH HEAD OTAH - RAW PRAWN OTAH - COOKED, WIRE MESH (17" X 25") BRUSH, WIRE MESH (17" X 25") NON-SPICY OTAH - COOKED, MUTTON SATAY - RAW (50 STICKS)	SAMBAL SQUID-RAW ORIGINAL FISH OTAH - RAW ORIGINAL FISH OTAH - COOKED CHARCOAL (3KG) CHICKEN SATAY - RAW (50 STICKS)

(3) Market Basket Analysis

We identified which products complement each other through analysis of previous purchases.

TIME SERIES ANALYSIS

Trends of LWB's orders are analysed by leveraging seasonality to aid the forecasting of future demand.



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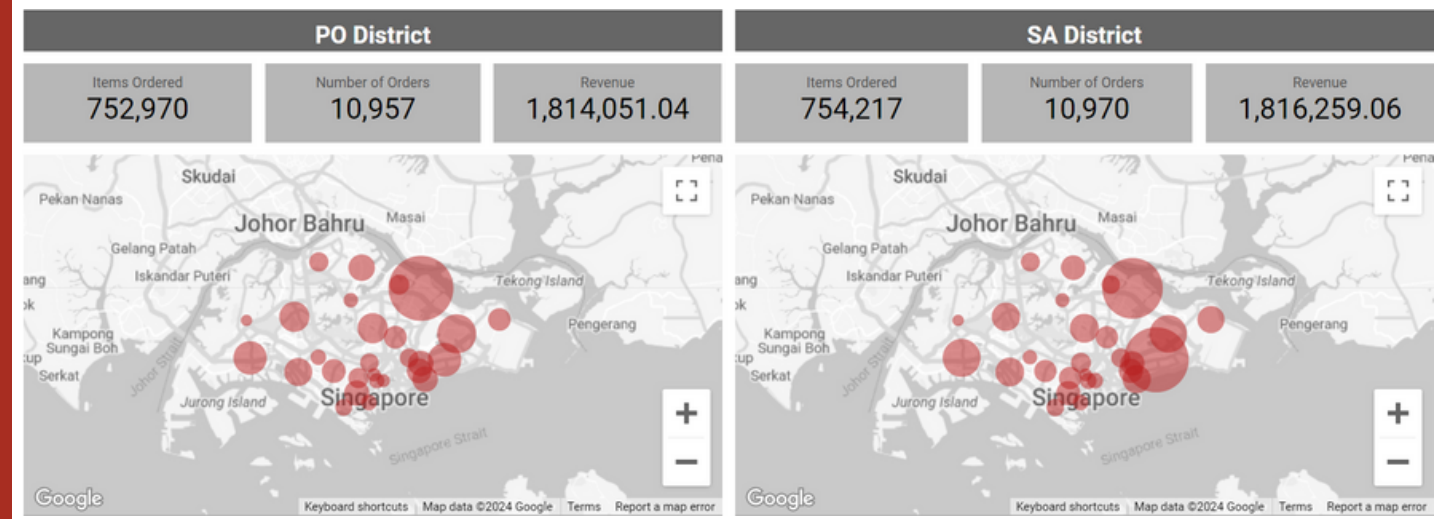
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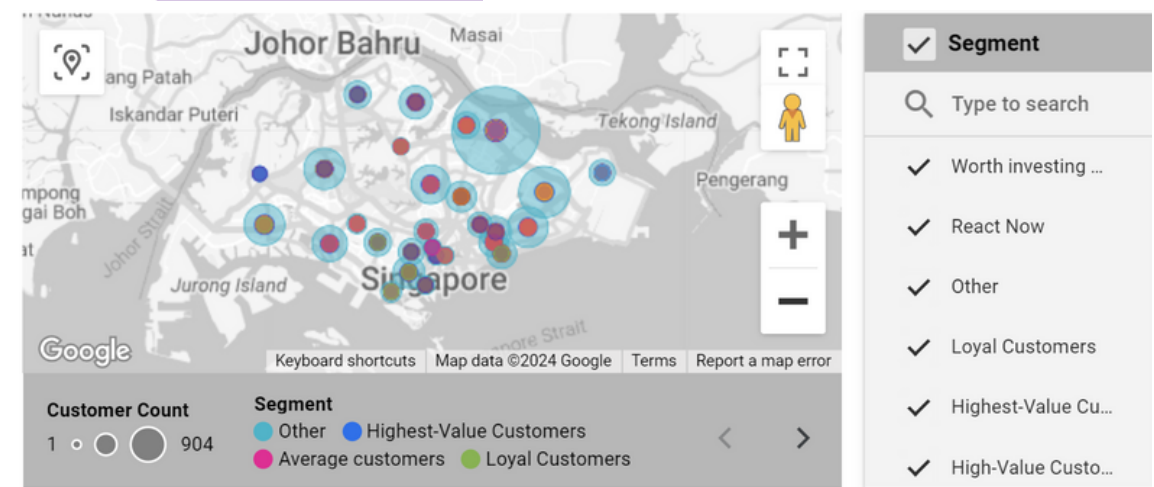
Zone	No. Of Customers	Average Spendings	Total Spendings
north	2,671	\$251	\$671,083
east	2,252	\$267	\$601,559
west	1,598	\$313	\$499,909
central	1,050	\$306	\$321,177
city	569	\$321	\$182,559
south	471	\$328	\$154,560

(2) Statistical Breakdown by Geographical Region

These geographical region statistics provide key insights into customer numbers and spending patterns across different geographical regions. By examining the data, we can identify both popular and less popular areas.

RECENCY-FREQUENCY-MONETARY (RFM) ANALYSIS

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PRODUCT ANALYSIS

Our team analysed the overall popularity of products through the following methods:

Product Ranking by Revenue								
Inventory Item Code	1	2	3	4	5	6	7	8
08BCL001	-	-	-	-	-	-	-	272,693.74
01CCL001	136,980.27	-	-	-	-	-	-	-
08B3J001	-	-	-	-	-	-	-	135,947.61
09BCC001	-	-	-	-	-	-	-	91,04
08B3G001	-	-	-	-	-	-	-	86,976.07
03CCS001	-	-	82,328.5	-	-	-	-	-
09BMS001	-	-	-	-	-	-	-	60,154
06TCL007	-	-	-	-	-	52,114.77	-	-
06T3J007	-	-	-	-	-	50,675.19	-	-
08BEB001	-	-	-	-	-	-	-	43,437.67
06T3G013	-	-	-	-	-	41,630.84	-	-
04CMT001	-	-	-	40,834.13	-	-	-	-
Grand total	242,210.21	11,891.89	147,491.4	179,330.58	9,483.89	172,878.09	24,599.21	690,025.33

(1) Ranked by Revenue

Products are divided into separate categories, with its respective inventory item code reflected on the Y-axis. The total revenue of each product category are represented on the X-axis.

(2) Ranked by Frequency of Orders and Quantity Ordered

We grouped products by its item code, and calculated a combined score with different assigned weights; a higher weight is allocated to frequency of orders and a lower weight is allocated to quantity ordered.

Product Ranking by Score			
Inventory Item Code	Items Ordered	Number of Orders	Combined Score
01CCL001	179,705	4,012	1
03CCS001	107,995	2,224	0.56
08BCL001	52,549	2,482	0.55
01CCL002	25,122	1,623	0.35
08B3J001	24,487	1,537	0.33
09BCC001	1,995	1,659	0.33
08B3G001	16,253	1,183	0.25
04CMT001	2,507	1,259	0.25

Purchases

- SAMBAL DORY FISH-RAW
- NON-SPICY OTAH - RAW, FISH HEAD OTAH - RAW
- PRAWN OTAH - COOKED, WIRE MESH (17" X 25")
- BRUSH, WIRE MESH (17" X 25")
- NON-SPICY OTAH - COOKED, MUTTON SATAY - RAW (50 STICKS)

Complements

- SAMBAL SQUID-RAW
- ORIGINAL FISH OTAH - RAW
- ORIGINAL FISH OTAH - COOKED
- CHARCOAL (3KG)
- CHICKEN SATAY - RAW (50 STICKS)

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