

Unveiling Challenges

Addressing and Analyzing Operational Issues in a Small Business

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Overview

XYZ

Location: Salem, Tamil Nadu

Owner: Mr. R

Business Product: Onions

Key Features

- Owned and run by a single person
- Small scale business, operating from owner's home
- Advertised through posters and word-of-mouth

Data-Driven Focus

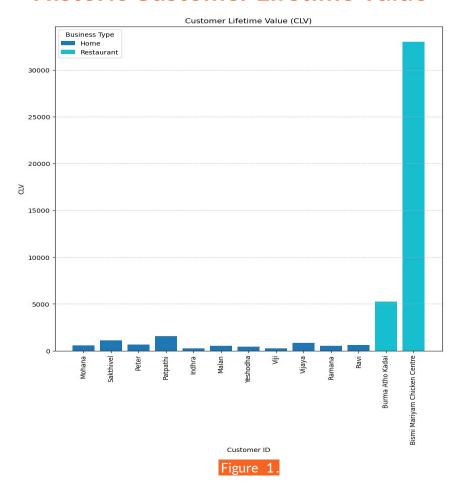
Objective

 Utilize advanced data analysis for enhancing customer base and scaling up of business at XYZ

Project Focus

- Retention of Customers: Identify the factors for low customer retention rates and implement strategies hence improving overall customer loyalty.
- Expansion of Business: Overcome sole ownership limitations by restructuring the business model to expand geographically.

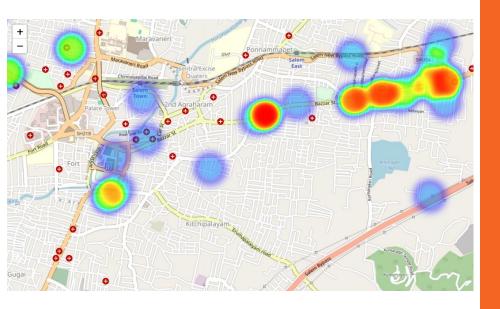
Historic Customer Lifetime Value



Customer Lifetime Value(CLV) Analysis

- The data underscores the importance of repeat business, as reflected in CLV.
- Notably, Customer "Bismi Mariyam Chicken Centre," boasts a remarkable CLV of 33000.0, followed by "Burma Atto Kadai" with CLV of little over 5000
- This indicates significant business success, suggesting strong revenue generation potential of restaurants.

Potential Restaurants Heatmap



GeoSpatial Analysis For Potential Business Expansion

- **Figure 2** presents a heatmap depicting the density of restaurants in proximity to Kitchipalayam
- Substantial business prospect exists near Ammapet and Salem town. Targeting these regions for marketing initiatives holds promise for driving further growth and geographic diversification of the business.
- Restaurants constitute a significant segment of both retained clientele and revenue generation.

Figure 2.

Customer Feedback Analysis

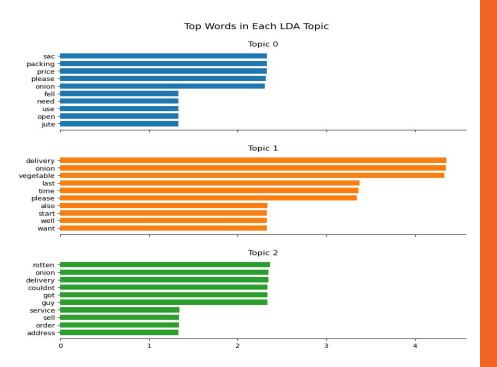
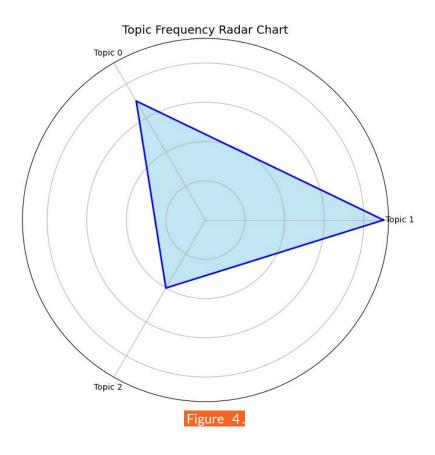


Figure 3.

Topic Modeling (LDA)

- Figure 3, Illustrates each plot representing a topic generated by the Latent Dirichlet Allocation(LDA) model, each plot corresponding to the top words linked with that topic along with their respective weights.
- LDA Interpretation: Topic 0 shows words like "sac,"
 "packing," "price," "jute," and "open" indicating
 discussions about the packaging material used, pricing
 concerns, etc.
- Topic 1 includes words like "delivery," "onion," "vegetable," "please," and "well," suggesting discussions about the delivery process, the quality of onions, and customer requests or feedback about other vegetables.
- Topic 2 includes words such as "rotten", "couldn't", "service", "sell" and "order" suggesting instances where customers received onions of poor quality or faced issues with the delivery or ordering process.

Customer Feedback Analysis



Frequency Analysis

- **Figure 4**, The radar chart illustrates that Topic 1 has the highest frequency of occurrences as 9, followed by Topic 0 as 7 and then Topic 2 as 4.
- In this case, efforts may be directed towards addressing the issues discussed under Topic 1 more comprehensively due to its higher frequency of occurrence, followed by Topics 0 and 2.

Geospatial Analysis



Figure 5.1

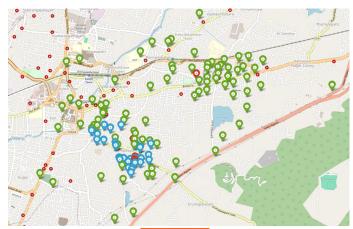


Figure 5.2

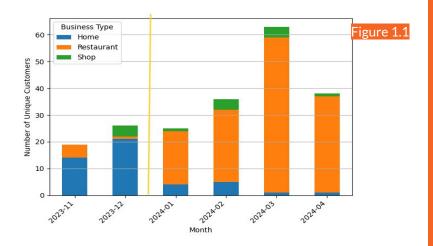
Before Targeted Marketing (Nov'23 - Dec'23)

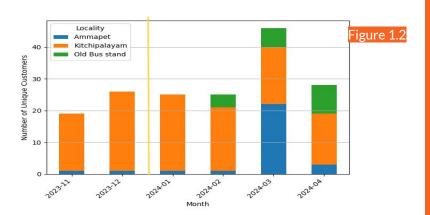
- Figure 5.1 the distribution of businesses across geographical regions in Salem. Blue pins: residential areas, green pins: restaurants, and red pins: retail outlets
- A concentrated customer base is observed in the Kitchipalayam vicinity.
- There's a prevalent distribution of home-based customers in the area during this period.

After Targeted Marketing (Jan'24 - Apr'24)

- **Figure 5.2** shows significant increase in the overall customer base.
- This suggests a successful impact of the marketing campaign in attracting more customers to the restaurant businesses in the specified locality.

Trend Analysis Chart





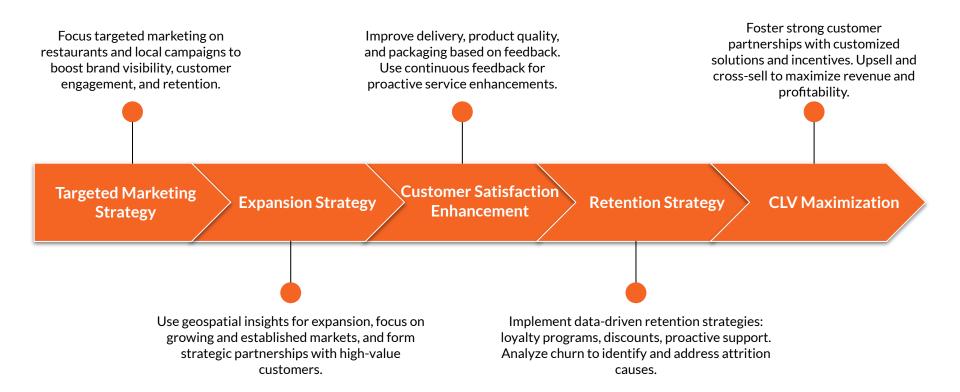
Comparing Customers by Business Type (Figure 1.1)

- Initially, homes and restaurants attracted more unique customers from Nov'23 to Dec'23.
- After targeted marketing towards restaurants, it led in customer count by Jan' 24,demonstrating the effectiveness of strategies in boosting restaurant customer engagement and retention.

Comparing Customers by Location (Figure 1.2)

- Before targeted marketing, Kitchipalayam led in customer count, followed by Ammapet and Old Bus Stand.
- Post-marketing, Kitchipalayam retained its lead, while Ammapet fluctuated, and Old Bus Stand grew
- Suggesting effects of targeted marketing in customer engagement differently across areas, underscoring the importance of localized strategies for customer acquisition and retention.

Recommendations



Thank You!