

Sticks Kebob Shop Customer Data Analysis

Executive Summary

This report presents the findings from an extensive analysis of customer data from Sticks Kebob Shop. The analysis encompasses data cleaning, exploratory data analysis (EDA), customer segmentation using both K-Means and hierarchical clustering, and provides actionable recommendations for business expansion and marketing strategies. Two primary customer segments were identified: **"Practical Families"** and **"Quality Seekers."** The report concludes with targeted recommendations for business growth based on the insights gained.

1. Introduction

Sticks Kebob Shop is looking to expand its operations and enhance its marketing strategies by better understanding its customer base. This analysis was conducted to provide insights into customer demographics, behaviors, and preferences, with the goal of identifying distinct customer segments and making informed recommendations for business growth.

2. Data Preparation

2.1 Data Cleaning

- **Handling Missing Values:** Addressed missing data by imputing values or removing rows where necessary.
- **Consolidation of Professions:** Consolidated the profession column into broader categories to simplify analysis.
- **Column Renaming:** Renamed columns for clarity and relevance.

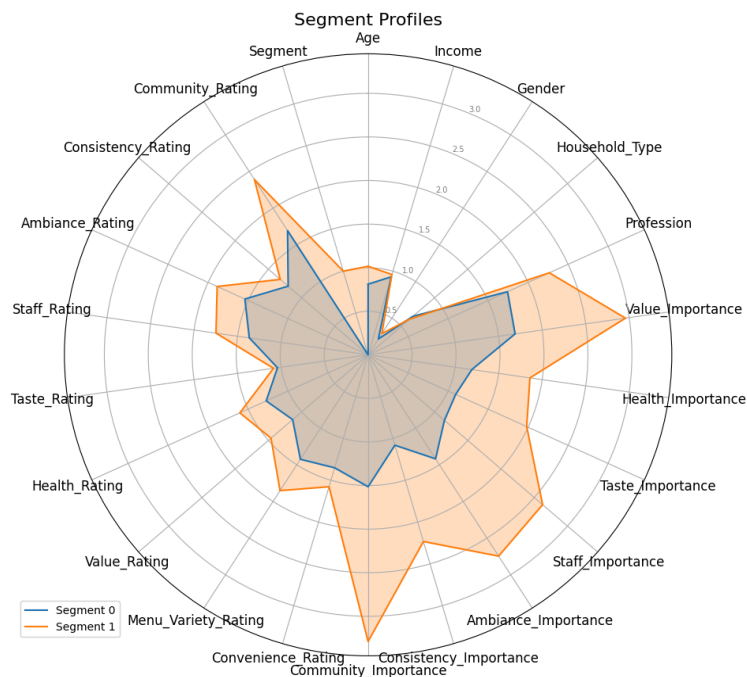
2.2 Data Overview

- **Demographic Data:** Variables included age, income, gender, household type, and profession.
- **Behavioral Data:** Variables included customer preferences (e.g., importance of value, health, taste) and perceptions of competitors.

3. Exploratory Data Analysis (EDA)

3.1 Demographic Insights

- **Gender Distribution:** Majority of customers are female.
- **Age Distribution:** Primarily young adults, with a significant portion in the 26–40 age range.



Segment 1: "Practical Families"

- **Demographics:** Predominantly young female customers in family-oriented households with middle incomes.
- **Behavior:** This segment is practical in their dining choices, moderately concerned with value and taste but less focused on health, service, and ambiance. They seek a good balance between cost and experience, making them more price-sensitive and less demanding overall.

Segment 2: "Quality Seekers"

- **Demographics:** Slightly older, still predominantly female, with middle to upper-middle incomes. This group is often composed of professionals.
- **Behavior:** They prioritize value, health, taste, and ambiance. This segment seeks a high-quality dining experience, with strong preferences for consistency, excellent service, and community involvement. They are more selective and willing to pay for quality.

Expansion Recommendations

1. Location Analysis

After analyzing the demographic data and consumer profiles, **Location D** has been identified as the most promising option for expansion. This recommendation is based on the following factors:

- **Largest Population:** Location D has the highest population (57,509), offering a broad customer base.
- **High Median Income:** The median income of \$75,500 in Location D suggests that the residents have the financial capacity to support both affordable and premium offerings.
- **High Consumer Spending:** With the highest consumer spend of \$1,184 million, Location D indicates a market with strong purchasing power and a willingness to spend on dining experiences.
- **Aligned Customer Profiles:** The demographic and customer profiles in Location D align well with both identified segments—"Practical Families" and "Quality Seekers." Moreover, the profiles also suggest potential resonance with the non-customer segments—"Careful Planners" and "Cautious Spenders."

2. Strategic Recommendations

2.1 Balanced Menu Development

- **Varied Offerings:** To attract both "Practical Families" and "Quality Seekers," the menu should offer a balanced mix of affordable, family-friendly options, as well as premium, health-conscious choices. This approach will ensure that the needs of both segments are met.

- **Health and Local Focus:** Given the moderate importance of health and local products to the "Careful Planners" and "Cautious Spenders," highlighting locally sourced, healthy menu items can appeal to both customer and non-customer segments.

2.2 Marketing Campaigns

For "Practical Families":

- **Family Promotions:** Offer family meal deals and loyalty programs that provide value for money, catering to their focus on affordability and practicality.
- **Convenience-Focused Advertising:** Highlight the convenience and quick service aspects of Sticks Kebob Shop, making it an attractive option for busy families.

For "Quality Seekers":

- **Emphasize Quality and Experience:** Focus on marketing the quality of food, health benefits, and the overall dining experience. Highlight community involvement and consistency, which are key factors for this segment.
- **Premium Offerings:** Introduce limited-time premium menu items that cater to their preference for high-quality, unique dining experiences.

2.3 Community Engagement

- **Local Partnerships:** Strengthen ties with the community by partnering with local businesses and sponsoring community events. This strategy aligns well with the preferences of "Quality Seekers" and the moderate emphasis on local products by non-customer segments.
- **Family-Friendly Events:** Host events that appeal to families, such as kids-eat-free nights or family fun days, which will attract "Practical Families" and encourage repeat visits.

2.4 Operational Focus

- **Consistency in Service:** Ensure that the quality of food and service remains consistent across all locations. This focus on consistency is crucial for maintaining the loyalty of "Quality Seekers."
- **Staff Training:** Invest in comprehensive staff training programs to ensure that the service quality meets the high expectations of your target segments, particularly the "Quality Seekers."
- **Digital and Mobile Presence:** Enhance the digital experience by offering mobile-friendly services, such as online ordering and loyalty apps. This will appeal to all segments, particularly the non-customers who value convenience and quick service.

Conclusion

Location D offers the best potential for expansion, with its large population, high median income, and significant consumer spending. By implementing the above strategies—tailored to the distinct needs and preferences of "Practical Families," "Quality Seekers," and non-customer segments like "Careful Planners" and "Cautious Spenders"—Sticks Kebab Shop can effectively attract a diverse customer base. The focus should be on providing a balanced menu, engaging marketing campaigns, consistent service, and strong community involvement to ensure sustained growth and success in this new location.