INSTITUTO TECNOLÓGICO Y DE ESTUDIOS SUPERIORES DE MONTERREY

Campus Ciudad de México

MegaMart Analysis

Course: Application of multivariate methods in data science

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Video link: https://youtu.be/US8B2CBnwUw

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Executive Summary

Business Problem

MegaMart currently treats its customer base as a single, uniform group. Promotions, email campaigns and digital experiences are largely generic, without considering how different customers shop, how often they visit, or how much they spend. This "one size fits all" approach leads to three main challenges:

- Marketing resources are spread thin across all customers, instead of focusing on the most valuable or most promising groups.

- Campaigns are not sufficiently relevant for many customers, which lowers engagement and conversion rates.

- There is limited visibility into which types of customers are at risk of leaving and which have the highest growth potential.

Our project objective was to address these challenges by analyzing the behavior of 3,000 MegaMart customers. Using their shopping and digital interaction history (such as purchase frequency, basket size, total spend, response to email campaigns, returns and time since last purchase), we identified natural behavioral groups and translated them into clear, business-friendly customer segments.

High-Value Loyalists (17.5 % of customers)

Who they are. These customers are MegaMart's most valuable group. They shop very frequently (close to weekly), spend well above the average customer and show strong loyalty over time. They open and interact with MegaMart's email campaigns regularly and make few returns. They tend to buy across multiple categories and are comfortable both in-store and online.
Key behaviors.

- Very high total spend and high purchase frequency.

- Larger-than-average baskets with a mix of everyday items and higher-margin products.

- High engagement with digital channels and low return rates.

Big-Basket Planners (14.4 % of customers)

These customers do not buy as often, but when they do, they place large orders. They are planners: they visit MegaMart every few weeks, but fill their cart with many items at once. Their total spend is high due to these big baskets, and many of them have been customers for a long time.

Key behaviors.

- Medium purchase frequency but very large baskets.

- Strong total spend concentrated in fewer visits.

- Long-standing relationship with MegaMart, with relatively stable habits.

Everyday Value Seekers (37.1 % of customers)

This is MegaMart's largest segment. These customers visit regularly and browse actively, but their spend per visit is moderate. They tend to make small to medium purchases, often driven by price, promotions and convenience. They interact with the website or app often, viewing many products even if they do not always buy.

Key behaviors.

- Moderate total spend with steady purchase frequency.

- Smaller baskets but high browsing and product-view activity.

- Open to suggestions and promotions, especially those that emphasize value.

At-Risk Occasionals (31.0 % of customers)

These customers have low activity levels. They buy rarely, spend little when they do visit and often have a long time since their last purchase. They are more likely to return products, which can indicate lower satisfaction or mismatched expectations. This group represents the highest risk of churn.

Key behaviors.

- Low purchase frequency and small baskets.

- Longer gaps between visits and lower loyalty.

- Higher than average return rates and weaker engagement with digital channels.

Strategies by Segment

High-Value Loyalists (17.5 %).

- **VIP rewards program.** Create an exclusive tier with early access to sales, special discounts and occasional "surprise and delight" gifts (birthday coupons or free samples).

Big-Basket Planners (14.4 %).

- **Bulk bundles and family packs.** Design "monthly stock-up" bundles combining common household staples with an attractive discount, clearly communicated before their usual purchase cycle.

- **Cart value incentives.** Offer free delivery, extra loyalty points or small gifts above a certain cart value to reward large orders and secure more of their monthly spend.

Everyday Value Seekers (37.1 %).

- **Personalized promotions.** Use their browsing patterns to send targeted offers in the categories they explore most but do not yet buy frequently, encouraging them to try new items.

- **Digital engagement.** Introduce gamified elements (digital stamps, challenges, or instant-win coupons) that reward regular visits and small additional purchases.

At-Risk Occasionals (31.0 %).

- **Reactivation campaigns.** Send "welcome back" messages with simple, time-limited coupons to give them a clear reason to return and place a new order.

By adopting this segment-based strategy, MegaMart can move from generic, mass marketing to precise and impactful actions. Focusing on the most valuable and most promising customer groups will help increase revenue, improve loyalty and make marketing investments more efficient in the short and long term.