

# Customer Segmentation and Strategic Recommendations

## MegaMart Business Report

### **Authors:**

Eduardo Botello Casey - A01659281

Cesar Isao Pastelin Kohagura - A01659947

Luis Emilio Fernandez Gonzalez - A01659517

Aplicación de métodos multivariados en ciencia de datos (602)

Juliho David Castillo Colmenares

17-11-2025

## 1. Strategic Context and Problem Definition

MegaMart is currently facing several strategic challenges that constrain its growth and reduce the effectiveness of its commercial efforts. Marketing campaigns are overly generic and fail to account for the diverse behavior across the customer base, resulting in low engagement and inefficient allocation of resources. This lack of precision impacts critical metrics such as Customer Lifetime Value (CLV), marketing ROI (MROI), and churn rate. In particular, high-risk customers are not being detected early enough to deploy retention measures.

In this context, data-driven segmentation becomes essential to empower targeted campaigns, streamline resource allocation, design personalized customer experiences, and inform strategic decisions across pricing, product, and customer journey optimization. This report uses behavioral metrics and clustering techniques to identify distinct customer profiles and translate them into actionable strategic initiatives.

## 2. Customer Segmentation Insights

The segmentation analysis identified four clearly differentiated customer groups, each with unique behavioral patterns, value contributions, and risks. Understanding these clusters enables more precise resource allocation and targeted marketing strategies.

### 2.1. Cluster 0 — High-Value Champions (17.5%)

**Profile:** Highly profitable customers with high purchase frequency, large basket sizes, low recency, and long tenure.

**Strengths:** Disproportionately contribute to revenue with stable behavioral patterns.

**Risks:** Susceptible to silent churn if premium experience declines.

**Strategic Objective:** Prioritized retention and value expansion.

### 2.2. Cluster 1 — Window Shoppers (31%)

**Profile:** Users who browse frequently but rarely convert, exhibit high recency, and show elevated return rates.

**Strengths:** Significant traffic volume that can be converted at low incremental cost.

**Risks:** High friction during checkout and low purchase intention.

**Strategic Objective:** Reactivation and conversion.

### 2.3. Cluster 2 — Premium Occasional Buyers (14.4%)

**Profile:** Customers who make few but high-value purchases; short sessions with minimal browsing.

**Strengths:** Strong transaction value.

**Risks:** Vulnerable to competition due to infrequent engagement.

**Strategic Objective:** Increase purchase frequency and foster recurrence.

### 2.4. Cluster 3 — Low-Engagement Mass Segment (37.7%)

**Profile:** The largest but least profitable segment: low ticket size, low interaction, and limited contribution to revenue.

**Strengths:** Large base suitable for scalable, low-cost tactics.

**Risks:** Low ROI under standard marketing investment.

**Strategic Objective:** Improve profitability through cost-effective approaches.

## 3. Cluster-Based Strategic Actions

Each segment requires specifically tailored initiatives designed to maximize its contribution while mitigating its associated risks. The following recommendations can be implemented in quarterly cycles and evaluated with clear performance indicators.

### 3.1. Cluster 0 — High-Value Champions

**Objective:** Preserve value and expand revenue.

- **Premium loyalty program:** Early product access, exclusive services, and priority perks.
- **Personalized campaigns:** Model-driven recommendations based on purchase history.
- **VIP churn alerts:** Automated triggers when frequency or recency declines.
- **Priority customer support:** Immediate resolution of friction points to prevent churn.

### 3.2. Cluster 1 — Window Shoppers

**Objective:** Reactivate and convert.

- **Dynamic retargeting:** Product reminders, temporary offers, and availability notifications.

- **Optimized checkout flow:** Reduce steps, eliminate unnecessary fields, enable one-click purchase.
- **Reactivation incentives:** Exclusive “welcome back” discounts for inactive users.
- **Recency-based email journeys:** Automated sequences triggered by browsing gaps.

### 3.3. Cluster 2 — Premium Occasional Buyers

**Objective:** Increase frequency and foster recurring purchases.

- **Complementary product recommendations:** Based on high-value purchase history.
- **Subscriptions or scheduled reminders:** For products with natural replenishment cycles.
- **Simplified customer journey:** Stored preferences, streamlined navigation, and fast checkout.
- **Second-purchase incentives:** Exclusive benefits for completing a follow-up purchase within a set period.

### 3.4. Cluster 3 — Low-Engagement Mass Segment

**Objective:** Improve profitability at low cost.

- **Volume promotions and bundles:** Incentivize larger baskets at minimal acquisition cost.
- **Mass automation:** Broad recommendations and general-purpose promotional content.
- **Inventory optimization:** Prioritize high-rotation items preferred by this segment.
- **Upward-mobility detection:** Identify users who show early signs of transitioning into Cluster 2.

## 4. Expected Business Impact

### 4.1. Cluster 0 Impact

Maintain low churn, high purchase frequency, strong basket size, and current profit margins. All actions aim to preserve and expand the segment’s strategic value.

## 4.2. Cluster 1 Impact

Projected outcomes include a **40% reduction in return rate** and a **50% increase in transactions**, normalizing performance relative to the platform average.

## 4.3. Cluster 2 Impact

Expected effects include a **40% increase in monthly visits** and a **30% growth in completed purchases**, addressing frequency and recurrence gaps.

## 4.4. Cluster 3 Impact

Goals include a **30% increase in basket size** and a **30% improvement in engagement**, elevating the segment toward standard platform behavior.

# 5. Next steps and recommendations for each quartile (Q1–Q4)

## Q1 — Foundations and Initial Activation

- Deploy recency-based automation journeys for Clusters 1 and 2.
- Activate dynamic retargeting for browsing without purchase.
- Design the premium loyalty program for Cluster 0.
- Optimize checkout to reduce friction for Cluster 1.
- Launch base-level volume promotions and bundles for Cluster 3.

## Q2 — Personalization and Smart Retention

- Deploy model-based personalized recommendations (Clusters 0 and 2).
- Implement VIP churn alert system.
- Enable fast-purchase and simplified journeys for Cluster 2.
- Automate mass communications for Cluster 3.

### **Q3 — Value Expansion**

- Launch full premium loyalty program.
- Implement second-purchase incentive campaigns for Cluster 2.
- Execute advanced reactivation campaigns for Cluster 1.
- Align inventory optimization with Cluster 3 usage patterns.

### **Q4 — Optimization and Scale**

- Conduct full impact assessment: uplift, incremental revenue, retention.
- Retrain clustering model for updated segmentation.
- Promote transition of high-potential Cluster 3 users.
- Expand premium loyalty benefits and refine marketing based on ROI.

## **6. Presentation**

<https://youtu.be/1ee-Rb251Y4>