Aplicación de métodos multivariados en ciencia de datos

Group 602

MegaMart Customer Segmentation Analysis

Team 10

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Video presentation link

https://youtu.be/ZgQpu_5e-CA

Megamart has strong customer data, but the lack of customer segmentation leads the company to generic marketing, wasted resources, and missed growth opportunities. Without a proper segmentation, Megamart won't be able to identify the different types of customers they have and therefore, they won't be able to create strategies to maintain or retain said customers. Our team analyzed more than 3,000 customers using behavioral and transactional data to discover natural customer segments that can guide targeted marketing and strategic decision-making.

After the analysis of the data set provided, we identified four types of customer, each with their distinctive behaviors and needs. The segments go as follows:

- Segment 1 - Loyal Costumers: Highly devoted consumers that exhibit frequent purchases, huge basket sizes, strong digital engagement, high total spending, extended tenure, and extremely low return rates make up this sector. They constitute the core group that generates steady revenue and enduring devotion, representing MegaMart's most important and reliable clients. They make purchases almost every week, interact with promotional content frequently, return products infrequently, and anticipates special attention and tailored experiences to further strengthen her bond with the business.
- Segment 2 - High Returners: In addition to having the longest recency periods, the lowest email engagement, and the highest return rates among all customers, this group of customers spends a lot of time exploring yet makes very few purchases. This conduct indicates a high level of curiosity but a lack of confidence or drive to finish purchases, perhaps as a result of confusing product details or perceived risk. They are indecisive, need certainty, thorough product explanations, and powerful conversion incentives because they regularly return items, compare items across sessions, and abandon baskets.
- Segment 3 - Seasonal Shoppers: This group exhibits high basket sizes, moderate tenure, normal to high total spend, and a somewhat positive return rate. They also make significant purchases when they do make purchases. These clients are important but sporadic, they seem to react to seasonal sales, significant promotions, or certain life events. They make high-value purchases and enjoy timely reminders and carefully chosen bundles related to seasonal opportunities.

- Segment 4 - New and Casual: Customers that shop infrequently, buy little baskets, have low engagement and total expenditure, have short tenure, and have poor return rates are represented by this largest sector. Their actions imply that they are either unfamiliar with the brand or are still determining whether it meets their demands. They engage with the brand minimally, and need focused onboarding messaging, tailored recommendations, and initial incentives to boost their activity.

Each segment has different characteristics, therefore they need different strategies. For the first segment, which are the Loyal Customers, MegaMart can establish a VIP rewards program with special advantages, offer highly customized promos based on past performance, and provide priority customer service. Long-term client lifetime value is greatly increased and their loyalty is reinforced by these acts. With the High Returners, they should try to lower doubt and cart abandonment, the business could run instructional and reassurance-focused ads, give powerful conversion incentives like time-limited discounts or free shipping on subsequent purchases, and offer real-time support like chat support or guided shopping.

For the Seasonal Shoppers, MegaMart could advertise well chosen bundles and bulk-purchase packages, send out seasonal reminders in line with significant occasions, and provide early access to discount events or special seasonal coupons. These tactics can optimize their already high transaction value and successfully raise the frequency of their purchases. Lastly for the New and Casual shoppers, an organized welcome journey with customized onboarding messaging, introductory offers to encourage a second purchase, and product suggestions based on their initial browsing and purchasing habits is the most effective strategy. These actions promote recurring business and assist build brand recognition.

Because they have the highest lifetime value, spending, and engagement, the Loyal Customers should be given top priority and retention efforts on this group are extremely cost-effective. Seasonal Shoppers should be given medium priority because of their high-value purchases, even little increases in frequency can lead to significant revenue gain. New and Casual shoppers should be given medium-low priority despite their low individual value because of their large population size, which makes even little increases in conversion have a big effect. High Returners should receive focused and cost-effective attention because

of their low conversion and high return rates, which make them expensive to engage unless campaigns are carefully adjusted.

It is anticipated that focused retention tactics for Loyal Customers will lower attrition by as much as 25%, protecting crucial recurring income. Seasonal shoppers could increase their annual contribution by 15% to 20% if they make more purchases. Given the scale of the market, activating even a tiny portion of New and Casual Shoppers might result in significant advantages. It is anticipated that personalized messaging will boost email open rates by 30%-40% and conversion rates by 15%-20% for all demographics. Additionally, providing High Returners Shoppers with guided browsing and clearer product information could minimize return rates by 10%-15%, which would save operating expenses.

Implementing the segmentation model into MegaMart's CRM to automatically assign each customer to a section, creating customized campaigns for each group, and running A/B testing to gauge the success of customized tactics are the immediate next steps. Incorporating product-category preferences into the model, monitoring customer segment migration over time, and connecting segmentation findings with in-store behavior for a cohesive omnichannel approach are some of the medium-term suggestions. Long-term improvements should concentrate on automated personalization engines, real-time behavioral triggers, and regular segmentation model reevaluation to guarantee alignment with changing customer behaviors and business requirements.