To: ShopNow Management Team

From: Marketing Analytics Department

Date: February 9, 2026

Subject: Optimizing Engagement and Revenue through Data-Driven Clustering

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1. Segmentation Input & Preparation

To understand our customers, we knew we needed to look at more than just their purchase totals. We pulled together several data points using what's called the RFM Model. We also added website engagement metrics to get a fuller picture of how people interact with our brand.

We focused on three main things: how recently someone placed an order, how many orders they've placed overall, and their total spending. We also tracked how often they visit our site, because browsing behavior tells us a lot about interest level even when someone isn't actively buying.

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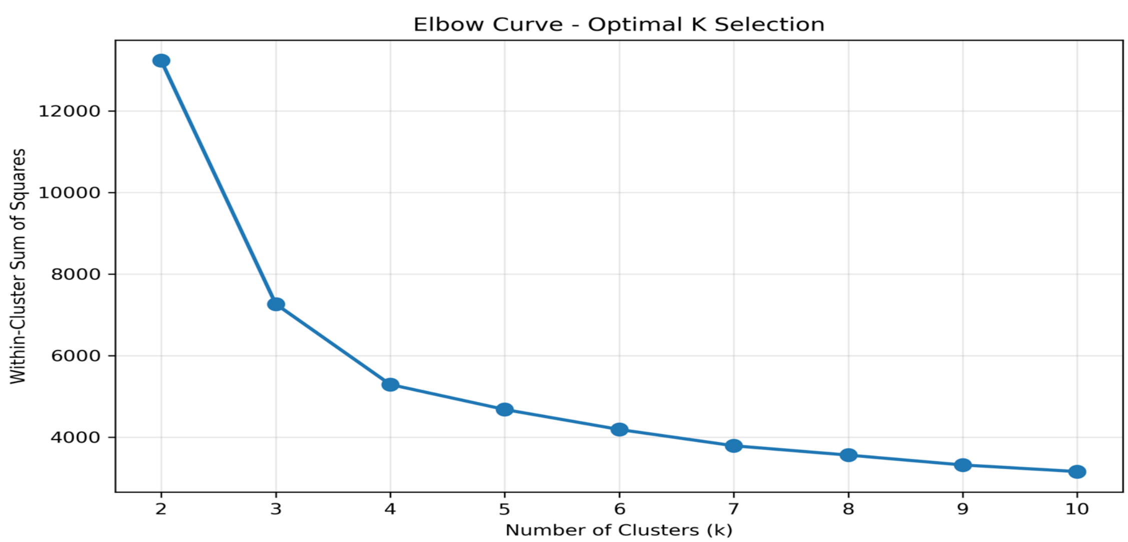
2. KMeans Implementation & The "Elbow" Method

We tested several scenarios, utilizing K-Means clustering algorithm multiple times, and found anywhere from 2 to 10 different customer groups. To determine the right number of segments, we used the Elbow Method. This helped us by plotting the "inertia" and where the elbow of the curve would flatten. The graph shows the curve leveling at 4 clusters, so we settled for this number because it provides the most actionable customer segmentation for our marketing team.



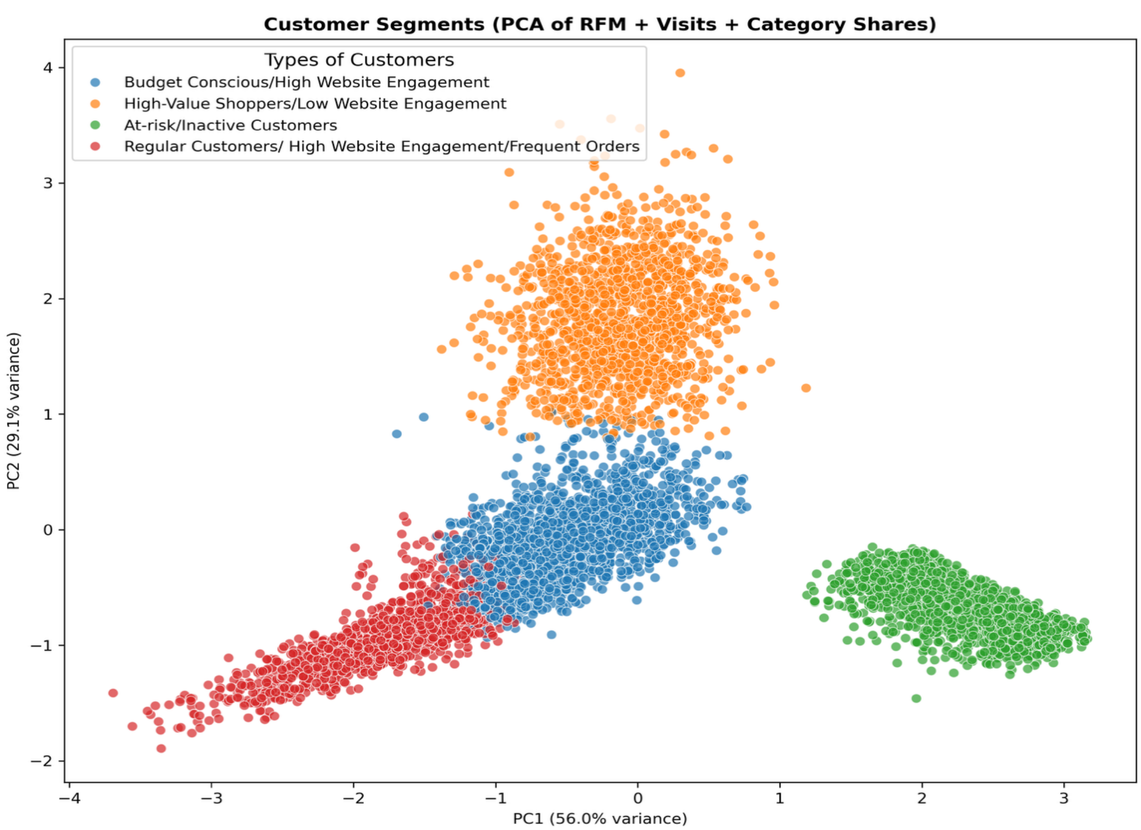
3. Cluster Profiling & Business Insights

When we looked at the results, four distinct customer types emerged. Each one represents a different opportunity we're not fully taking advantage of right now.

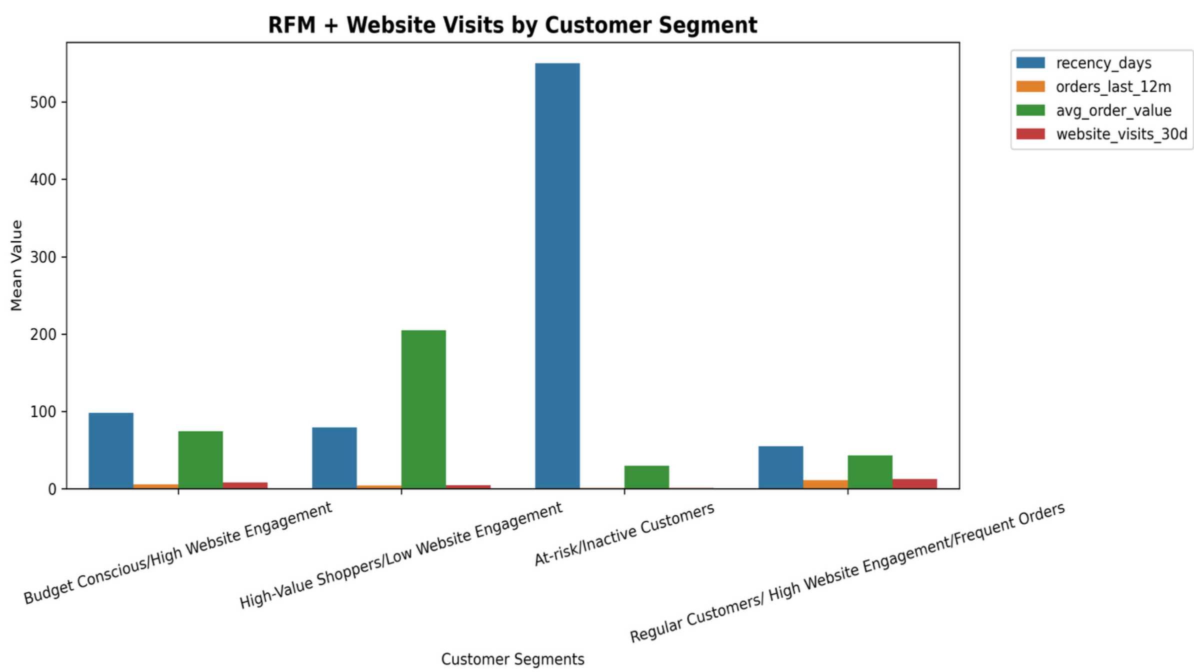
The first group we noticed were our budget-conscious regulars. These customers visit the site frequently and know what they want, but they're not spending much per visit. They're engaged with the brand, but something is keeping their purchases small.

Our high-value customers are interesting because they spend a lot when they do buy, but they're not coming to the site very often. They seem disconnected from the brand between purchases, which makes them vulnerable to competitors who might engage them more consistently.

Finally, we identified our at-risk segment—customers who haven't ordered recently and weren't particularly engaged even when they were active. These are the ones we're likely losing or have already lost.



Segment Name	Profile Summary	Key Opportunity
Budget-Conscious	High website visits; low order amounts.	**Conversion:** Use "Bundle & Save" offers to increase their spend per visit.
At-Risk	No orders in 12+ months.	**Retention:** Launch a "We Miss You" win-back campaign with a steep discount.
Regulars	Highest visit and order frequency; low spend.	**Upselling:** Implement a spend-based loyalty program to move them toward premium products.
High-Value	Highest spend; low engagement/visits.	**Loyalty:** Provide a "VIP Experience" with early access to bring them back more often.



4. Strategic Recommendations

Looking at these segments, it's clear we're losing potential revenue in two main ways.

First, we have customers who are already engaged but not spending enough. The Budget-Conscious and the Regular Customers are visiting our site and clearly like what we do, but we're not giving them the right incentives to increase their order sizes. We could offer them free shipping, bundle deals, or loyalty rewards that make bigger purchases feel worth it.

Second, our high-value customers aren't engaged enough. These are the people who spend the most when they buy, but they're not thinking about us regularly. If we don't find ways to bring them back to the site more often, we're giving competitors an opening. Whether it's through personalized emails, exclusive previews, or content that keeps them connected to the brand, we need to stay on top of their mind.

The at-risk segment is probably the hardest to recover, but even a small win-back rate would be valuable given how much it costs to acquire new customers. Targeted re-engagement campaigns might bring some of them back, especially if we can figure out what caused them to drift away in the first place.