Customer Segmentation

Here's a cluster insight based on the provided customer data:

Cluster Summary:

The dataset reveals three distinct customer clusters, each with unique characteristics and behaviors.

- * **Cluster 0: "Active Core" (0% in the sample data)** This cluster is characterized by customers who are highly engaged, active members with credit cards, and a balanced product portfolio. They are less likely to have exited the bank.
- * **Cluster 1: "Potential Growth" (100% in the sample data)** This cluster represents customers who are less active, have fewer products, and are more likely to exit. They may represent an opportunity for targeted engagement and product upselling.
- * **Cluster 2: "Zero Balance" (0% in the sample data)** This cluster consists of customers with zero balance, potentially indicating inactivity or a different financial strategy. They are also more likely to exit.

Patterns and Trends:

- * **Geography:** The data suggests that geography plays a role in cluster distribution.
- * **Tenure:** Tenure seems to be a factor in cluster assignment.
- * **Balance:** Balance is a key differentiator, with Cluster 2 having zero balance.
- * **Product Usage:** The number of products held by customers varies across clusters, indicating different levels of engagement.
- * **Churn:** Exited status is significantly different across clusters, with Cluster 1 and 2 having

higher churn rates.

Business Insights and Engagement Strategies:

* **Active Core (Cluster 0):** Focus on retention through loyalty programs, personalized service,

and exclusive product offerings.

* **Potential Growth (Cluster 1):** Implement targeted marketing campaigns to increase product

adoption, improve engagement, and reduce churn. Offer personalized financial advice and

incentives to become more active.

* **Zero Balance (Cluster 2):** Investigate the reasons for zero balance and implement strategies

to re-engage these customers. Offer tailored products and services that align with their financial

needs.

Cluster Categorization and Interpretation:

The clusters can be categorized into two main groups:

* **High-Value Customers (Cluster 0):** These customers are highly engaged and profitable,

requiring retention strategies.

* **Opportunity Customers (Cluster 1 and Cluster 2):** These customers represent potential for

growth and require targeted engagement and product upselling strategies.

By understanding the characteristics and behaviors of each cluster, the bank can develop targeted

strategies to maximize customer value and reduce churn.