Scenario: Excel Analysis

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Histogram 1: Frequency of Customer Tenure (in Months) by Medium-sized Groups



The graph (Histogram 1) above shows the frequency/percentage of customers’ length of tenure before becoming inactive through involuntarily/voluntarily measures. As shown in Histogram 1, many customers are active within the first 10 months. However, starting at 20 months, many customers voluntarily or involuntarily terminate their relationship with our company. Between 20 and 30 months, there is a significant drop where we lose approximately 75K customers. Last item to note, after 30 months, customer’s tenure steadily and consistently decreases.

Histogram 2: Frequency of Customer Tenure (in Months) by Granularized Groups



In the above diagram (Histogram 2), the tenure groups were granularized to assist in providing further clarification to the results displayed in Histogram 1. From a quick glance, we have three different anomaly areas. First, within Month 1, we are losing close to 30,000 customers so we need to determine if there are initial signups that should be eliminated or incentives that need added to encourage customers to stay past the first month. The next area of concern appears at the 13-month timeframe. It will be important to determine why close to 40,000 customers are leaving…are they unhappy and their one-year contracts are expiring so they leave for another company or have the incentives that initially brought them to us ended or is it a combination of both. Lastly, in the 100th month, there is a large spike (more than 60,000) of customers leaving the company. Either the business expected this spike, or our analysis discovered something of incredible importance that needs investigated/resolved.

Cumulative Percentage 1: Cumulative Percentage for Customer Tenure (in Months)

Chart

Description automatically generated

According to the Cumulative Percentage 1 graph, half our customers last about 18 months and half of our customers exceed 18 months. Starting around 100 months, the curve descends to zero which indicates that we have active customers with long tenures.