

## Recommendations & Trade-offs:

While tenure and month-to-month contracts were strong predictors of churn, these are well-known drivers. Our analysis focused on deeper interactions and meaningful customer subgroups to generate non-obvious, operational recommendations.

Using K-Means clustering on high-impact features, we identified three distinct customer segments that require differentiated retention strategies.

	Segment 1	Segment 2	Segment 3
<b>Tenure (months)</b>	<b>57</b>	<b>30</b>	<b>13</b>
<b>Monthly Fee</b>	<b>\$ 89.83</b>	<b>\$ 26.05</b>	<b>\$ 73.20</b>
<b>Number of Add-ons</b>	<b>3</b>	<b>0</b>	<b>1</b>
<b>Long Distance Fee per Month</b>	<b>\$ 24.20</b>	<b>\$ 19.82</b>	<b>\$ 23.97</b>
<b>Unlimited Data User</b>	<b>86%</b>	<b>23%</b>	<b>87%</b>
<b>Electronic Check Payment Method</b>	<b>31%</b>	<b>15%</b>	<b>50%</b>
<b>Fiber Optic User</b>	<b>65%</b>	<b>0%</b>	<b>58%</b>
<b>Month-to-Month Contract</b>	<b>29%</b>	<b>43%</b>	<b>87%</b>
<b>Age</b>	<b>48</b>	<b>44</b>	<b>48</b>
<b>Auto Payment</b>	<b>62%</b>	<b>42%</b>	<b>29%</b>
<b>E-bill</b>	<b>70%</b>	<b>37%</b>	<b>68%</b>
<b>Monthly Data Use (GB)</b>	<b>27</b>	<b>5</b>	<b>27</b>
<b>Percent</b>	<b>33%</b>	<b>29%</b>	<b>38%</b>

### Segment 1: Loyal Premium Bundled Users (33%)

These customers have long tenure, high monthly fees, multiple add-ons, and high unlimited data adoption. Churn in this group is less about contract structure and more likely driven by service failures or unexpected billing shocks.

Recommendation: Implement a VIP Retention Shield. Provide priority support, proactive service monitoring, and targeted long-distance plan optimization to reduce overpayment friction. Avoid aggressive upselling that risks eroding trust.

Tradeoff: Premium support requires dedicated resources, and over-investing in already loyal customers may produce diminishing returns.

### **Segment 2: Split Wallet Customers (29%)**

These mid-tenure customers have low monthly fees, low data usage, and limited add-ons. Many appear to split services with competitors. They are not deeply engaged and represent unrealized wallet share rather than immediate high value.

Recommendation: Offer structured data or fiber trials combined with a diagnostic outreach strategy to understand service splitting behavior. Focus on increasing engagement and converting them into primary-provider customers rather than offering blanket discounts.

Tradeoff: Competing for wallet share may require promotional investment, and some customers may never become high-value accounts.

### **Segment 3: Early-Life Month-to-Month Majority (38%)**

This is the largest and most strategically important segment. These customers have short tenure, high monthly fees, high unlimited data adoption, and a very high prevalence of month-to-month contracts and electronic check payments. They show strong revenue potential but are highly unstable.

Recommendation: Intervene early. Promote contract conversion before month 18, bundle add-ons to increase stickiness, and actively push auto-pay adoption to reduce payment friction. Prioritize this group in predictive churn campaigns due to its size and revenue impact.

Tradeoff: Incentivizing contract lock-in can compress margins, and repeated discounting risks creating dependency that leads to churn after promotions expire.