Churn Risk and CLV Analysis Report

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After comparing the AFT models based on their AIC score, LogNormal performed the best. Using the LogNormal AFT model, I found that features like having internet service, being unmarried, and using call forwarding increase churn risk, while older age, higher customer category, and address stability reduce it. These factors directly influence predicted customer lifetime and thus their overall CLV (Customer Lifetime Value). I define valuable customers as those with longer expected lifetimes and higher monthly revenue—primarily customers aged 45–64, in higher service categories, and without internet service-since they tend to stay longer and contribute more revenue over time. Identifying and nurturing these high-CLV customers is key to improving long-term profitability.

Assuming this data represents the full population, and with 20% of users at risk of churn in the next year, we estimate 200 vulnerable customers. At an average CLV of $3,500, the total value at risk is around $700,000. A realistic annual retention budget would be 10-20% of that-$70K to $140K. We recommend targeted offers for high-risk users, loyalty programs for high-CLV customers, and regular model updates to maintain performance.