In this analysis, we explored the factors influencing churn risk using parametric survival models. The Log-Logistic model was found to provide the best fit to the data. Interpretation of the coefficients revealed several insights:

- Address tenure was positively associated with churn risk, suggesting that customers who have been at the same address for longer periods are more likely to churn.

- Age had a positive effect on churn risk, indicating that older customers are more prone to churn.

- Marital status was also positively correlated with churn risk, implying that unmarried customers are more likely to churn compared to married ones.

To identify the most valuable segments, we define "valuable" as those segments with high CLV and low churn risk. By segmenting customers based on demographic and behavioral characteristics, we can target high-value segments for retention efforts. For instance, customers with high income, long tenure, and a history of engagement with our services may represent valuable segments warranting special attention.

Assuming the data represents the population, the annual retention budget can be estimated by considering the CLV of at-risk subscribers within a year. By multiplying the number of at-risk subscribers with their respective CLV estimates and accounting for survival probabilities, we can determine the budget required to retain customers and mitigate churn. This approach ensures strategic allocation of resources to maximize retention efforts and minimize churn-related losses.

In addition to conventional retention strategies, such as personalized communication, loyalty programs, and service enhancements, leveraging advanced analytics and predictive modeling techniques can provide deeper insights into customer behavior and preferences. Implementing proactive churn prevention measures, such as targeted interventions based on predictive analytics, can help mitigate churn risk and enhance customer retention in the long term. Continued monitoring and adaptation of retention strategies based on evolving customer needs and market dynamics are essential for maintaining customer loyalty and maximizing lifetime value.