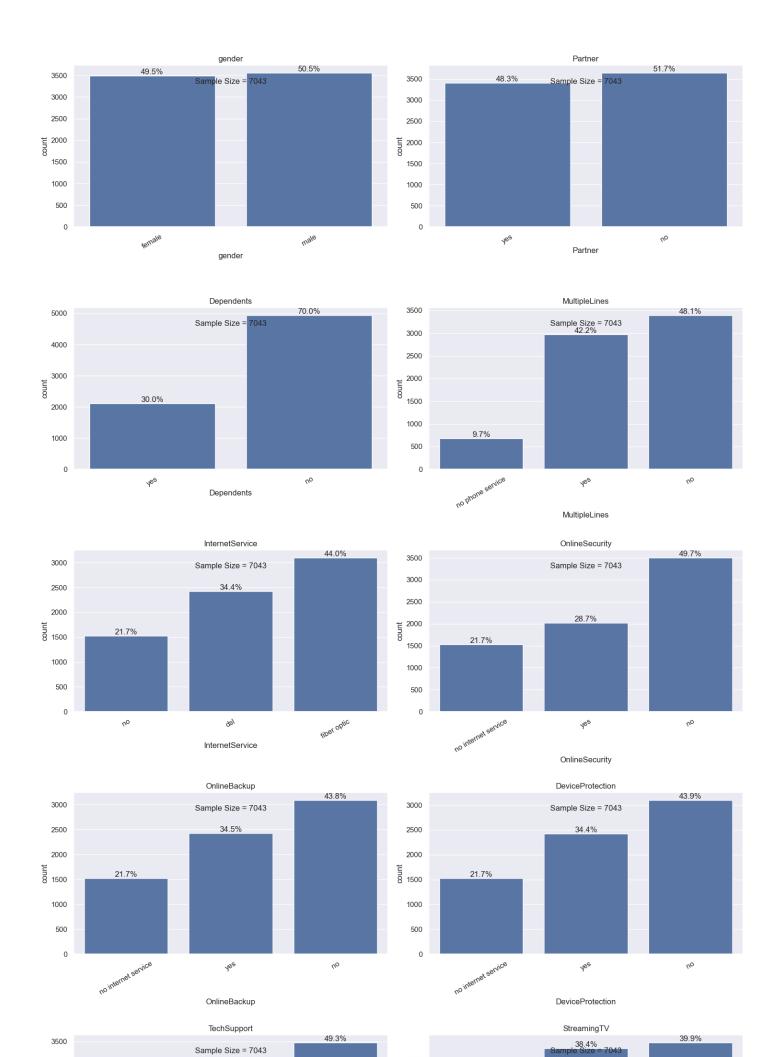
Single Countplot Barchart



Single Countplot Barchart Google Gemini Response

Actionable Insights & Solutions for Reducing Customer Churn:

Based on the provided charts, here are some actionable insights and solutions to address customer churn:

1. Contract Type:

- * **Insight:** A significant majority (55%) of customers are on month-to-month contracts. This group is more likely to churn as they have less commitment and flexibility to switch providers.
- * **Solution:** Offer incentives for longer-term contracts (e.g., discounts, loyalty programs). Consider introducing a tiered contract system with increased benefits for longer commitments.

2. Internet Service:

- * **Insight:** Customers with "fiber optic" internet service have a higher churn rate compared to those with "DSL" or no internet service.
- * **Solution:** Investigate why fiber optic customers are churning. Possible reasons could be pricing, service quality, or perceived value. Focus on improving these areas for this segment.
- **3. Online Security & Device Protection:**
- * **Insight:** Customers who don't subscribe to online security or device protection are more likely to churn.
- * **Solution:** Promote the value of these add-on services, highlighting their benefits and potential

cost savings in case of security breaches or device damage. Consider offering bundled packages with these services at a discounted price.

4. Streaming Services:

* **Insight:** Customers with "yes" to streaming TV or movies tend to have lower churn rates than those without these services.

* **Solution:** Continue to expand your streaming content library and offer competitive packages.

Highlight the entertainment value and convenience of your streaming services.

5. Payment Method:

* **Insight:** Customers using "electronic check" as a payment method have a higher churn rate.

* **Solution:** Explore why this payment method is associated with higher churn. It could be due to convenience or trust issues. Consider offering more payment options and providing transparent billing information to improve customer satisfaction.

6. Total Charges:

* **Insight:** A small proportion of customers with lower total charges exhibit a higher churn rate.

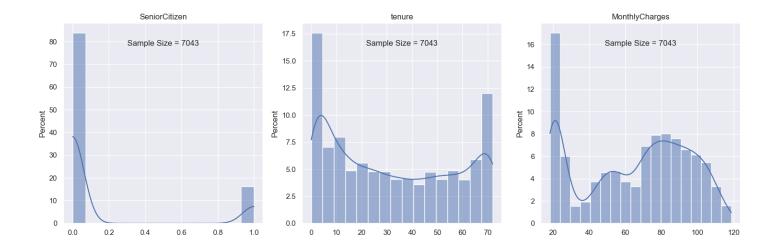
* **Solution:** Analyze the customer profiles within this segment. Are these new customers or customers who are reducing their service usage? Consider offering introductory plans or loyalty programs to retain them.

Additional Considerations:

- * **Customer Segmentation:** The provided charts show general trends but may not be entirely accurate for individual segments. Segment customers based on demographics, usage patterns, and other relevant factors for deeper insights.
- * **Qualitative Feedback:** Conduct customer surveys and interviews to understand the root causes of churn and specific pain points that drive customers away.
- * **Competitive Analysis:** Compare your offerings with your competitors and identify areas where you can differentiate yourself and enhance customer value.

By implementing these actionable insights and solutions, you can effectively address customer churn and build a loyal customer base. Remember to track your results and adjust your strategies as needed.

Single Histplot



Single Histplot Google Gemini Response

The chart shows that a large portion of the customer base is made up of senior citizens. This is important to understand because senior citizens are often more price-sensitive than other demographics, and they may be more likely to switch providers if they feel they're not getting a good value for their money. It could also be that senior citizens are more likely to be in a customer service representative's bad mood, so they are more likely to churn. The chart also shows that customer tenure is generally low, with most customers having been with the company for less than 20 months. This could be due to a variety of factors, such as poor customer service, lack of features, or high prices. The chart also shows that monthly charges are relatively high, with a significant number of customers paying over \$100 per month. This could be a major factor contributing to churn, as customers may be looking for more affordable options.

Actionable insights

- * **Offer discounts to senior citizens.** This will help make your services more affordable for this demographic and may help reduce churn.
- * **Improve customer service.** This is essential for all customers, but it is especially important for senior citizens, who may be more likely to experience frustration with complex or confusing systems.
- * **Offer more features.** Customers are always looking for more value for their money, so offering a wider range of features, such as streaming services or add-ons, could help attract and retain customers.
- * **Consider offering more affordable plans.** This could be a good option for customers who are price-sensitive and may be considering switching providers.

Solutions

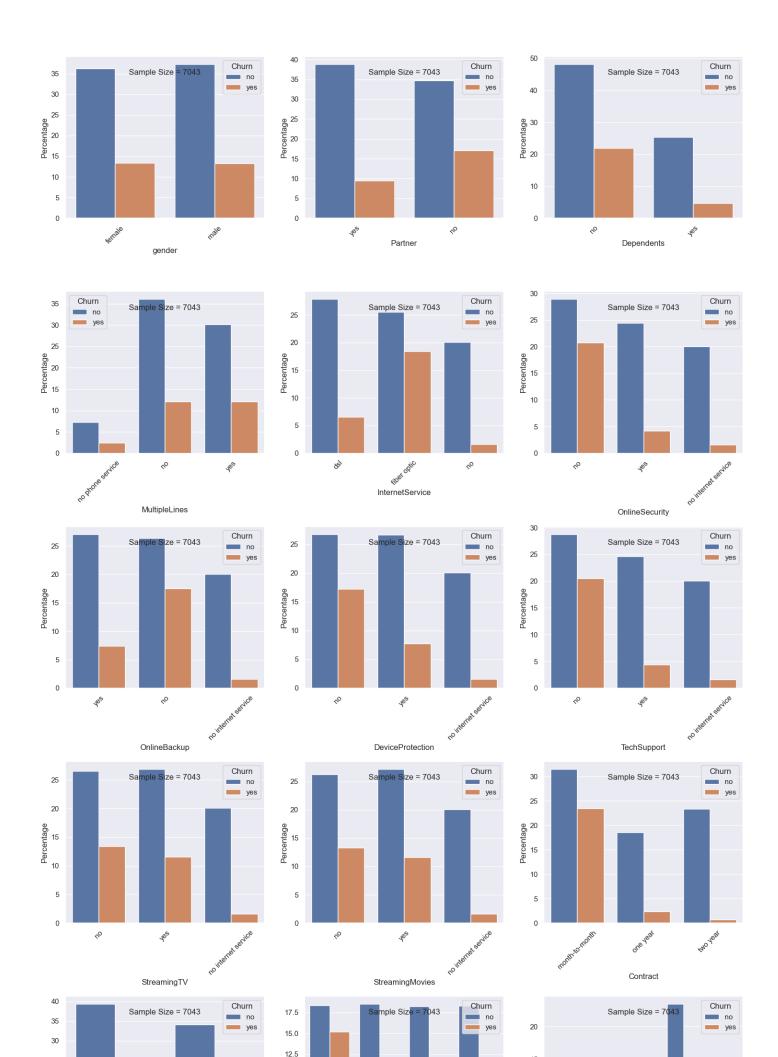
* **Implement a customer loyalty program.** This can help incentivize customers to stay with your

company. You might give discounts or exclusive offers to loyal customers.

- * **Conduct a customer satisfaction survey.** This will help you identify areas where you can improve your products and services.
- * **Use data analytics to identify customers who are at risk of churning.** This allows you to proactively reach out to these customers and offer them incentives to stay.
- * **Offer flexible contract terms.** This will help you retain customers who may be considering switching providers.
- * **Use social media to connect with customers.** This allows you to answer questions, address concerns, and build relationships with customers.
- * **Provide excellent customer support.** This is essential for retaining customers. Make sure your customer support team is responsive, helpful, and knowledgeable.

By implementing these solutions, you can reduce customer churn and improve the overall customer experience.

Multiclass Countplot Barchart



Multiclass Countplot Barchart Google Gemini Response

Actionable Insights and Solutions to Reduce Customer Churn

The provided charts offer valuable insights into customer churn patterns. Here are actionable insights and solutions based on the data:

- **1. Internet Service and Churn:**
- * **Insight:** Customers with "fiber optic" internet service have a higher churn rate compared to those with "DSL" or "no internet service."
- * **Solution:**
- * **Enhance Fiber Optic Value:** Implement strategies to enhance the value of fiber optic services, such as offering exclusive bundles, faster speeds, or unique content.
- * **Target Fiber Optic Customers:** Develop targeted retention campaigns specifically for customers with fiber optic service, emphasizing the benefits and addressing pain points.
- **2. Online Security and Churn:**
- * **Insight:** Customers who **don't** have "Online Security" are more likely to churn.
- * **Solution:**
- * **Promote Online Security:** Actively promote the value and importance of online security features, highlighting their benefits and addressing customer concerns.
- * **Offer Competitive Pricing:** Ensure that your online security packages are competitively priced and offer good value compared to competitors.
- **3. Device Protection and Churn:**
- * **Insight:** Customers who **don't** have "Device Protection" have a slightly higher churn rate.

* **Solution:**

- * **Targeted Marketing:** Run marketing campaigns emphasizing the benefits of device protection for specific customer segments, like those with expensive devices or a history of device issues.
- * **Flexible Options:** Offer flexible device protection plans with different coverage levels and price points to cater to diverse customer needs.

4. Tech Support and Churn:

* **Insight:** Customers with "month-to-month" contracts have a significantly higher churn rate compared to those with "one year" or "two year" contracts.

* **Solution:**

- * **Encourage Longer Contracts:** Offer incentives for customers to switch to longer-term contracts, such as discounts or bundled services.
- * **Review Pricing Strategies:** Analyze the pricing of month-to-month plans and consider introducing more competitive or bundled options to discourage switching.

5. Contract Duration and Churn:

* **Insight:** Customers with "month-to-month" contracts are more likely to churn, indicating a potential lack of commitment and satisfaction.

* **Solution:**

- * **Contract Incentives:** Provide discounts or bundled services for customers who sign up for longer contracts.
- * **Communication and Loyalty Programs:** Develop loyalty programs and communication strategies to encourage customer retention and incentivize long-term commitments.

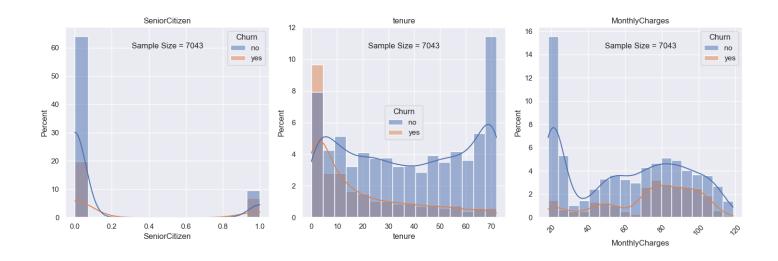
6. Streaming Services and Churn:

- * **Insight:** Customers who **don't** have "Streaming TV" have a slightly higher churn rate.
- * **Solution:**
- * **Promote Streaming TV:** Highlight the value and popularity of your streaming TV packages and emphasize the benefits over traditional cable.
- * **Content Partnerships:** Partner with popular content providers to offer exclusive streaming content and enhance customer experience.
- **7. Total Charges and Churn:**
- * **Insight:** There's a slight increase in churn rate among customers with higher total charges.
- * **Solution:**
- * **Transparent Billing:** Ensure clear and transparent billing practices to avoid confusion and dissatisfaction regarding charges.
- * **Value-Based Pricing:** Offer tiered pricing plans that provide different levels of service and value based on customer needs and budgets.
- **Market Context Considerations:**
- * **Competitive Landscape:** Analyze the offerings and pricing strategies of your competitors to identify areas where you can improve.
- * **Customer Demographics:** Understand the specific needs and preferences of different customer segments to tailor your retention strategies.
- * **Industry Trends:** Stay informed about industry trends and emerging technologies to offer relevant and innovative solutions.
- **Key Findings for Actionable Insights:**

- * **Service Features Matter:** Customers who lack access to features like online security, device protection, or streaming services are more likely to churn.
- * **Contract Length is Crucial:** Month-to-month contracts result in a higher churn rate.
- * **Value and Pricing:** Customers are more likely to churn when they perceive the service value to be low or the price to be high.

By implementing these solutions, businesses can effectively address key factors driving customer churn and improve customer satisfaction and retention.

Multiclass Histplot



Multiclass Histplot Google Gemini Response

The charts show the distribution of 'SeniorCitizen', 'tenure', and 'MonthlyCharges' across customers who churned (left the service) and those who didn't.

Key Findings:

- * **Tenure:** Customers with lower tenure are more likely to churn. This suggests that customers are more likely to leave in the early stages of their subscription.
- * **Monthly Charges:** Customers with higher monthly charges are more likely to churn. This could indicate price sensitivity, with higher prices making customers more prone to seek alternative options.
- * **Senior Citizen:** There isn't a clear trend associated with senior citizens. While the chart shows slightly higher churn rates for senior citizens, it is not a significant difference.

Actionable Insights and Solutions:

- * **Focus on Customer Retention in the Early Stages:** Implement onboarding strategies and targeted outreach to new customers to build loyalty and ensure a positive first impression.
- * **Offer Incentives and Rewards:** Consider loyalty programs, discounts, or special offers for long-term customers to incentivize them to stay.
- * **Price Optimization:** Analyze pricing strategies to determine if there are areas where prices can be adjusted to better align with customer value perceptions. Offer different price tiers or bundles tailored to different needs.
- * **Improved Customer Service:** Ensure a positive customer experience through responsive support, efficient issue resolution, and proactive engagement to address potential concerns before

they lead to churn.		
Additional Notes:		

- * **Segmentation:** Investigate further by segmenting customers based on demographics, service packages, or usage patterns to identify specific groups with higher churn rates and tailor strategies accordingly.
- * **Competitor Analysis:** Understand competitor pricing and offerings to identify competitive advantages and potential areas for improvement.

By implementing these insights and solutions, you can work towards reducing customer churn and building a stronger customer base.