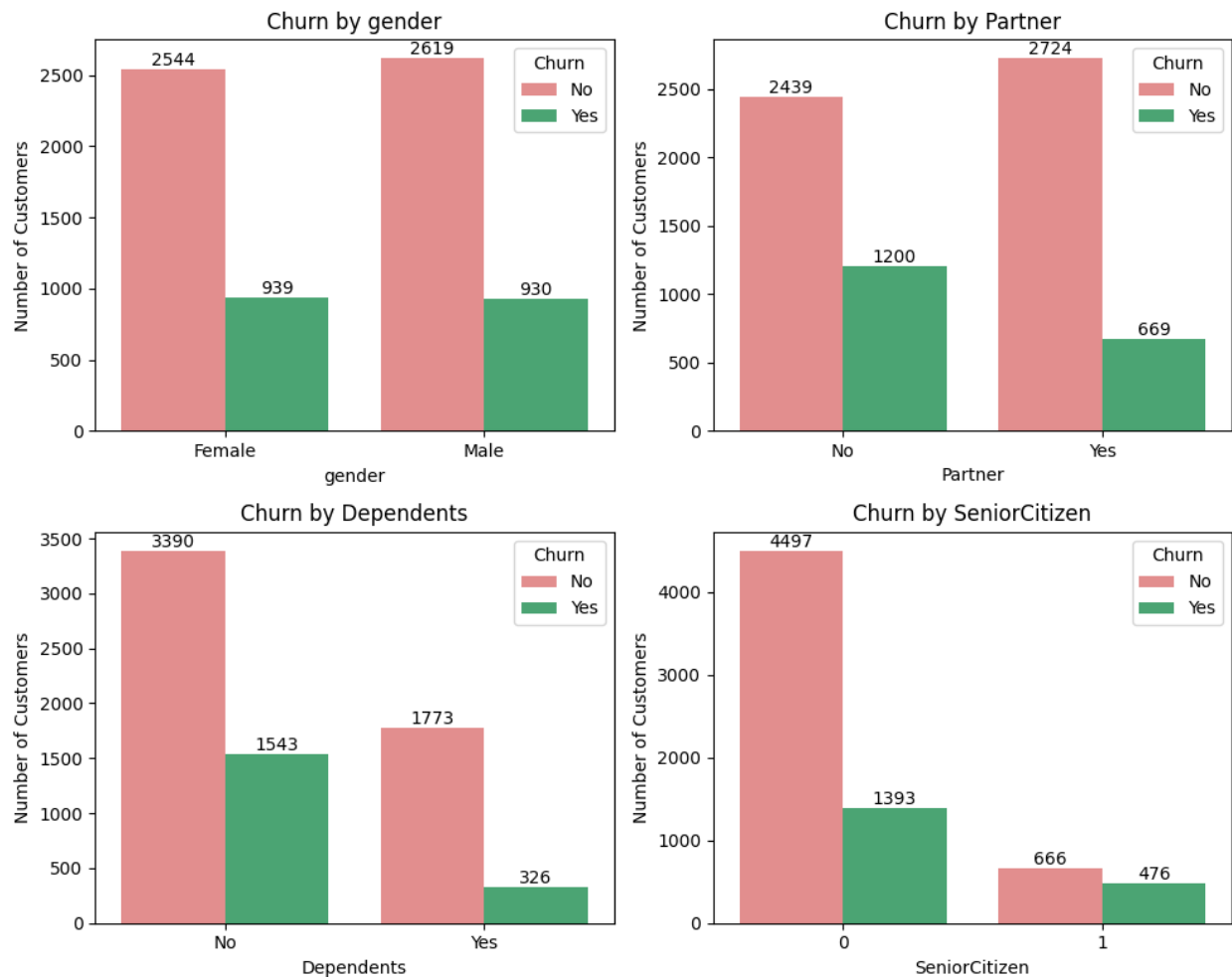


Telco Customers Churn Analysis:



Churn Analysis by Demographics | Key Insights:

Gender:

- Churn is nearly **identical across genders** (~940 churned customers each).
- **Implication:** Gender is **not a strong driver** of churn. Retention efforts should focus on other variables.

Partner Status:

- Customers **without a partner** show **higher churn (1,200 vs 669)**.
- **Implication:** Single customers may perceive less need for long-term service stability. Personalization and loyalty incentives may help reduce churn.

Dependents:

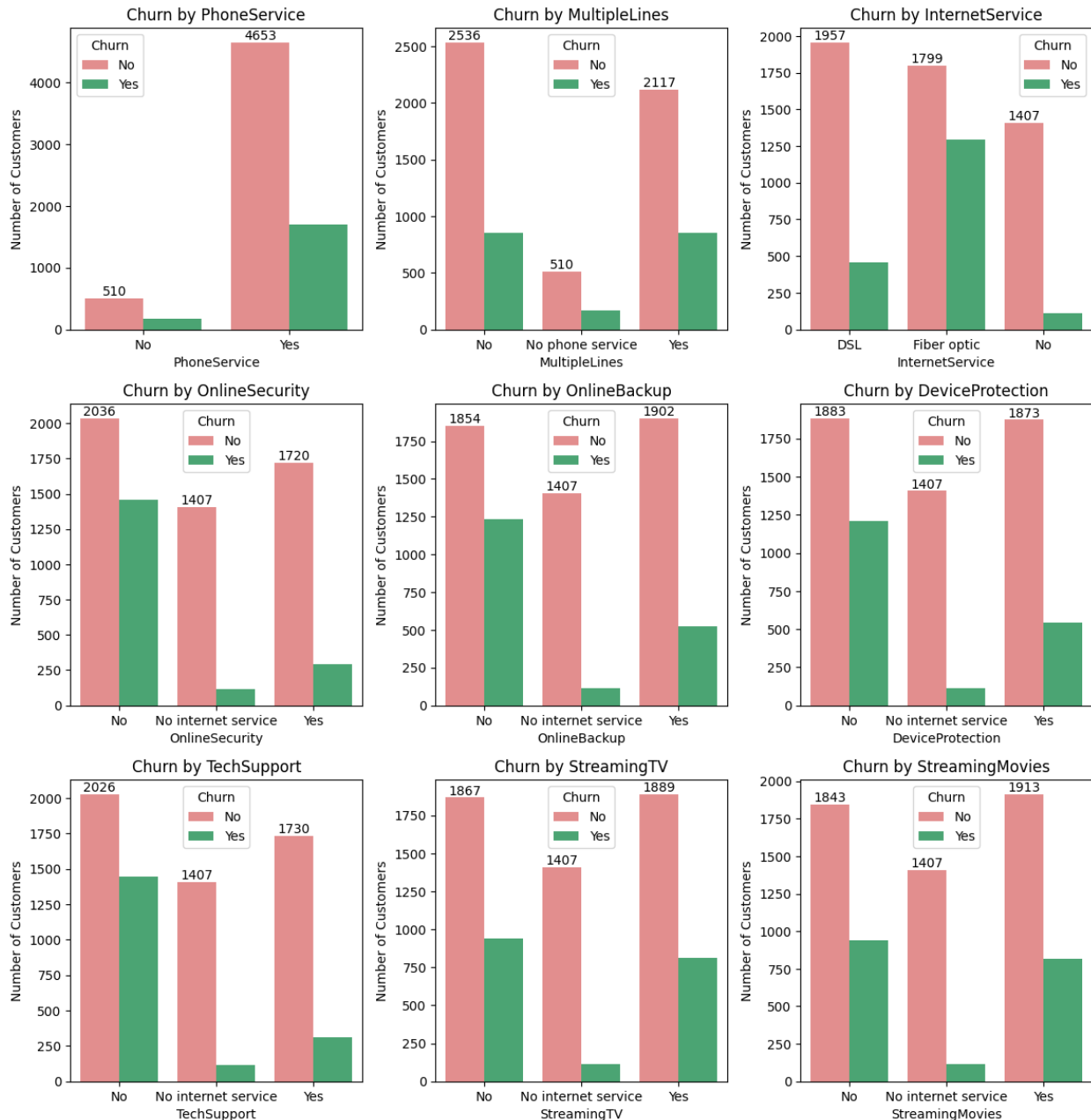
- Customers **without dependents churn significantly more** (1,543 vs 326).
- **Implication:** Those with family responsibilities may value service reliability more. Retention efforts should prioritize flexibility and convenience for customers without dependents.

Senior Citizen:

- **Senior citizens have a high churn rate relative to their population size** (476 out of ~1,142 → ~42% churn), while younger customers churn at a lower relative rate (~24%).
- **Implication:** Older customers may face usability, pricing, or value perception issues. Consider simplified plans, senior support, or loyalty discounts for this group.

Demographic-Based Churn Reduction Strategies

Segment	Key Issue	Recommendation
No Partner / No Dependents	Lower commitment, price sensitivity	Promote bundled offers or rewards for tenure. Highlight flexibility with commitment-free upsells.
Senior Citizens	Possibly overwhelmed by service complexity or price	Offer simplified, low-tech plans or proactive customer service check-ins. Provide clear, friendly onboarding.
All Genders	No significant difference	Gender-neutral marketing works; focus instead on behavior and contract preferences.



Churn Analysis by Services: Key Findings:

Phone & Multiple Lines

- **Customers without phone service** have low churn (~510), suggesting they're a niche, stable group.
- **Those with multiple lines churn more** (860 churned with multiple lines).
- **Implication:** Customers with more services are not necessarily more loyal — possibly due to complexity or pricing. Examine bundled service satisfaction.

Internet Service Type

- **Fiber optic users churn more (1,407)** than DSL users (~799).
- Customers **without internet service rarely churn**, indicating stability.
- **Implication:** Fiber optic customers may experience **higher expectations or dissatisfaction**. DSL users show stronger retention.

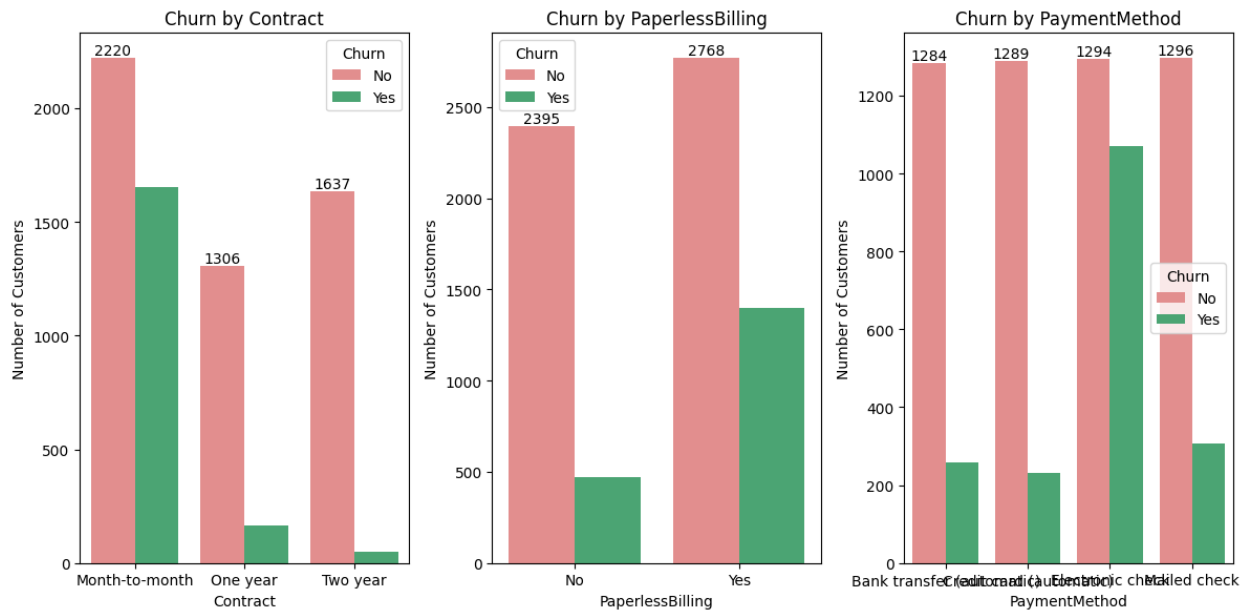
Value-Add Internet Services

Service	Churn w/ Service	Churn w/o Service	Insight
OnlineSecurity	376	1,407	Security services reduce churn .
OnlineBackup	432	1,407	Lack of backup increases churn .
DeviceProtection	489	1,407	Shows strong retention effect.
TechSupport	323	1,407	Most powerful churn reducer.
StreamingTV & StreamingMovies	~630 each	1,407	Lower churn with entertainment services too.

Conclusion: Customers who subscribe to **value-added services** — especially **tech support, security, and backup** — are more likely to stay.

Strategic Recommendations

Focus Area	Recommendation	Business Value
Fiber Optic Customers	Conduct satisfaction surveys or service audits. Consider loyalty pricing.	Reduce churn in high-revenue segment.
Internet Add-on Services	Upsell OnlineSecurity, Backup, and TechSupport during onboarding or renewal.	Increase retention with minimal cost.
Bundling Strategy	Bundle streaming, tech support, and device protection into tiered plans.	Enhance perceived value, reduce voluntary churn.
Multi-Service Users	Monitor satisfaction for customers with multiple services (e.g., multiple lines).	Address overload or billing concerns before they churn.



Churn Analysis by Contract, Billing, and Payment

Contract Type

- **Month-to-month contracts** have the **highest churn** (1,637 customers).
- **Churn drops drastically** with longer contracts:
 - 1-year: ~200 churn
 - 2-year: ~70 churn
- **Implication:** Contract length is the **strongest retention factor**, likely due to customer commitment or early termination fees.

Paperless Billing

- Customers with **paperless billing churn more** (1,400+ churn) than those without (~480 churn).
- **Implication:** While convenient, paperless billing may correlate with **lower engagement or awareness**. These users may also be more digital-savvy and quicker to switch providers.

Payment Method

- **Electronic check users churn the most** (~1,070 churned) — significantly more than any other method.
- **Other methods (credit card, bank transfer, mailed check)** show relatively low and consistent churn (200–300).

- **Implication:** Electronic check users may have **less trust or satisfaction**, or may be older, price-sensitive customers.

Business Recommendations

Focus Area	Recommendation	Business Value
Contract Strategy	Incentivize 1- or 2-year contracts with perks like discounts or exclusive support.	Strong reduction in churn — high ROI.
Paperless Billing	Combine paperless billing with proactive engagement (email summaries, support tips).	Retain digital customers who may churn silently.
Payment Method Behavior	Investigate why electronic check users are churning — consider migrating them to more stable payment channels.	Improve churn by targeting this high-risk group.
