Structured Pyramid Analysis Plan

Goal:

What factors influence customers to part ways with their existing service provider?

Dependent Variables:

Churn.

Specific Questions to Investigate:

1. What are the demographics of people who chose to stay/leave?

2. What kind of services do the existing customers subscribe to?

3. Does loyalty and money billed have an affect on the churn?

Identifying Independent Variables:

1.Based on demographics, we have the following variables.

Gender

Senior Citizen

Dependents

Partner.

2. Based on services subscribed, we have the following variables:

PhoneService

MultipleLines

InternetService

OnlineSecurity

OnlineBackup

DeviceProtection

TechSupport

StreamingTV

StreamingMovies

Contract

PaperlessBilling

PaymentMethod

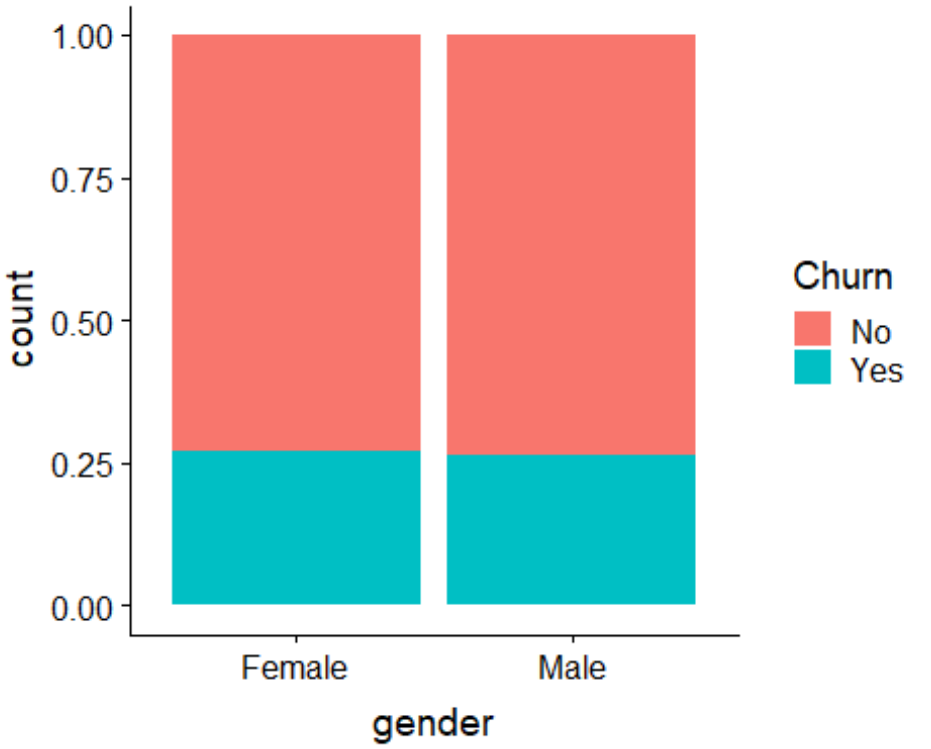
3. Based loyalty and money billed, have the following variables:

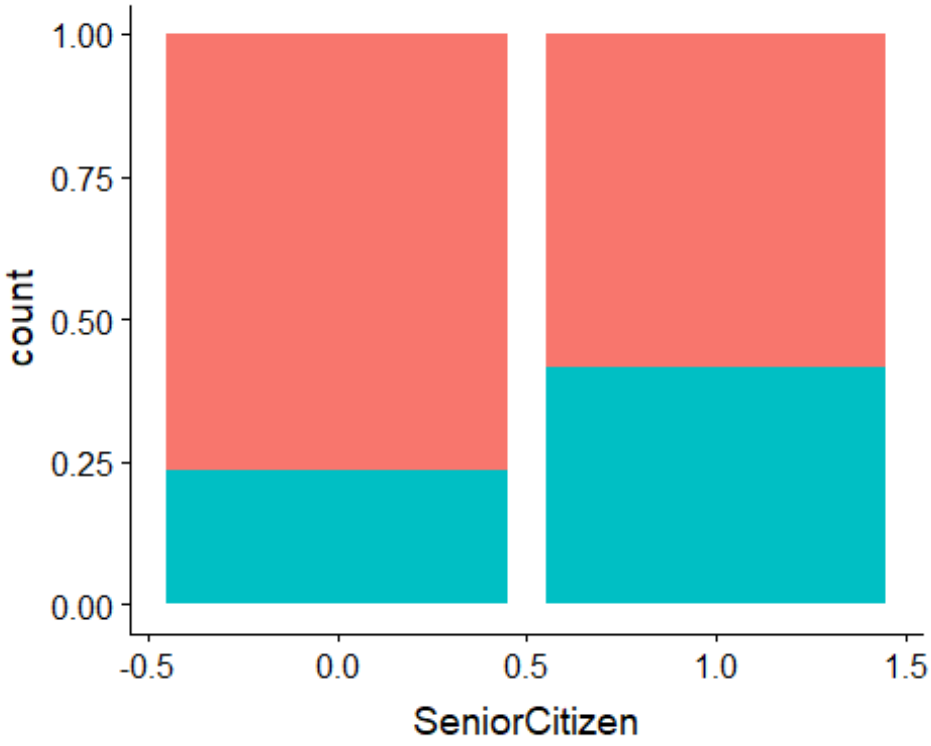
MonthlyCharges

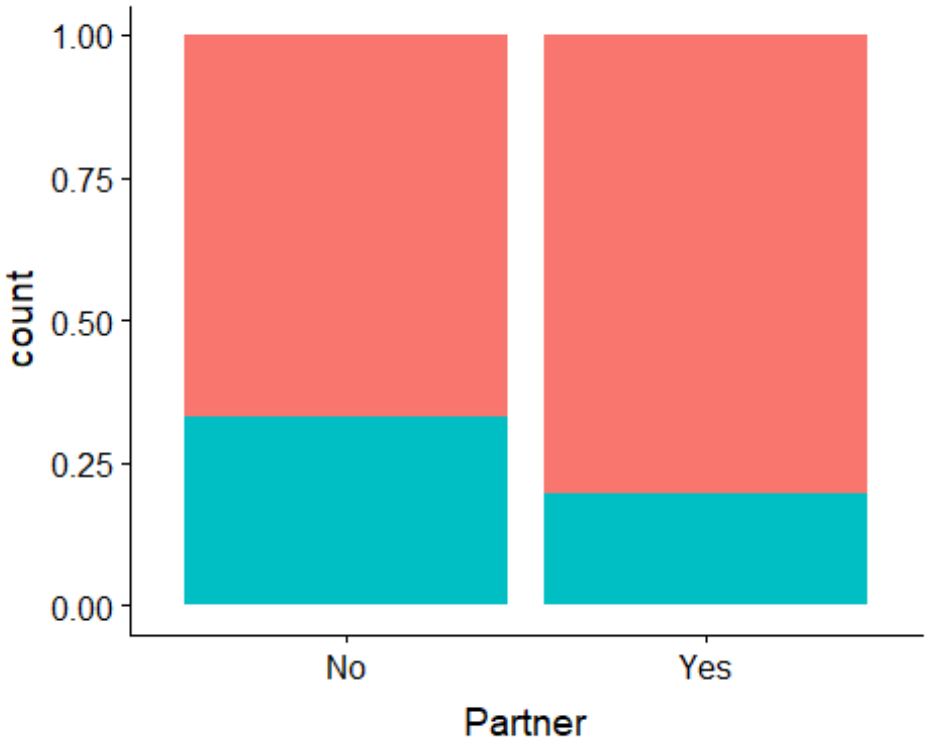
TotalCharges

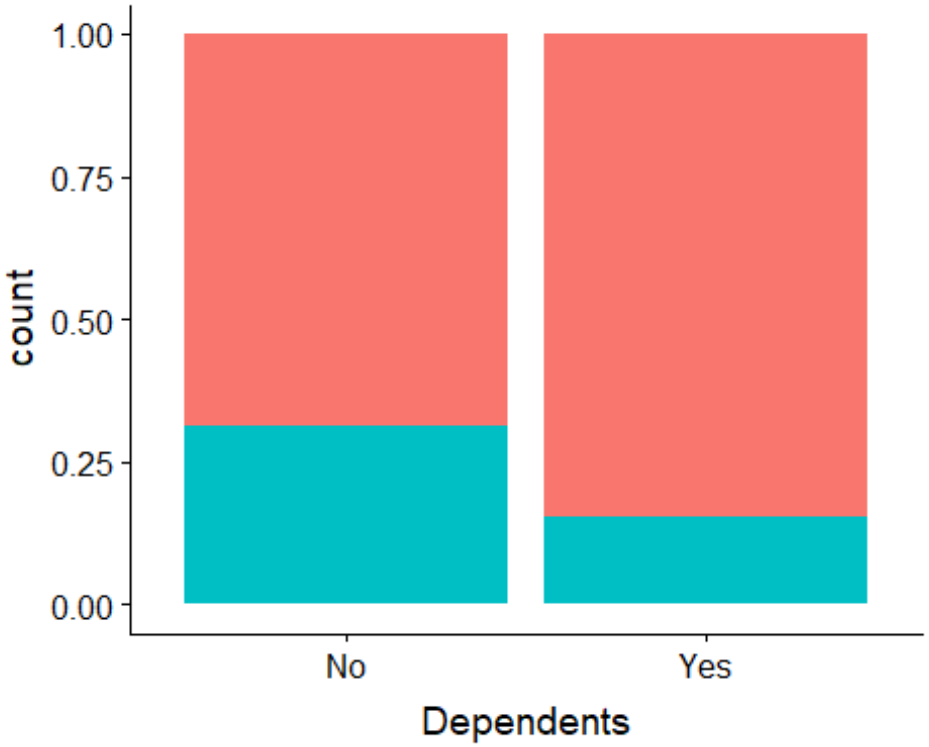
Churn

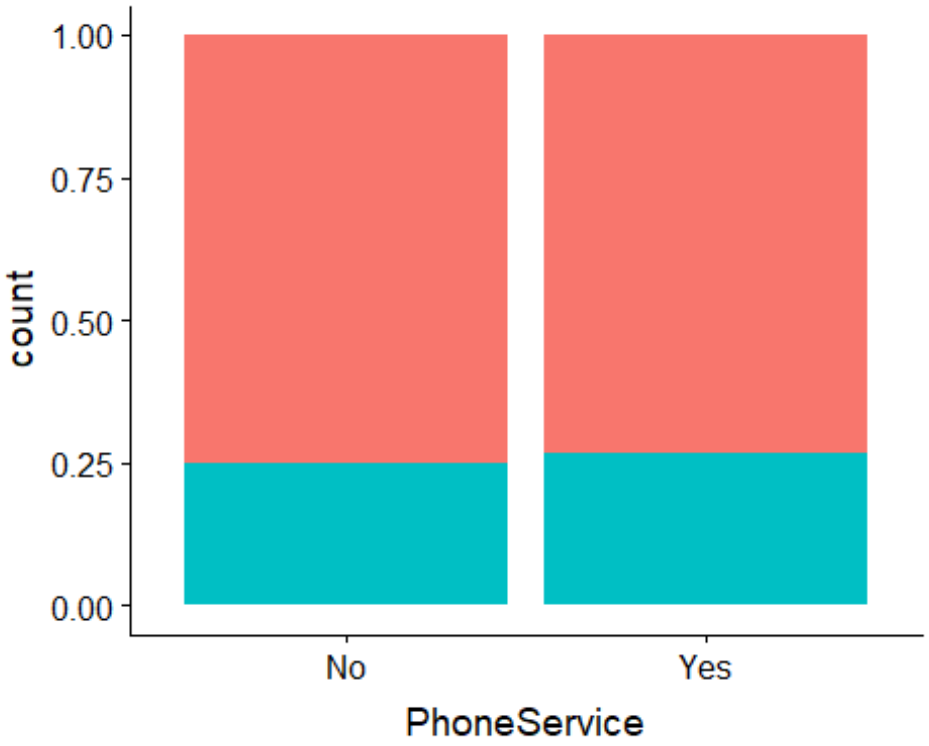
Specific Analyses:

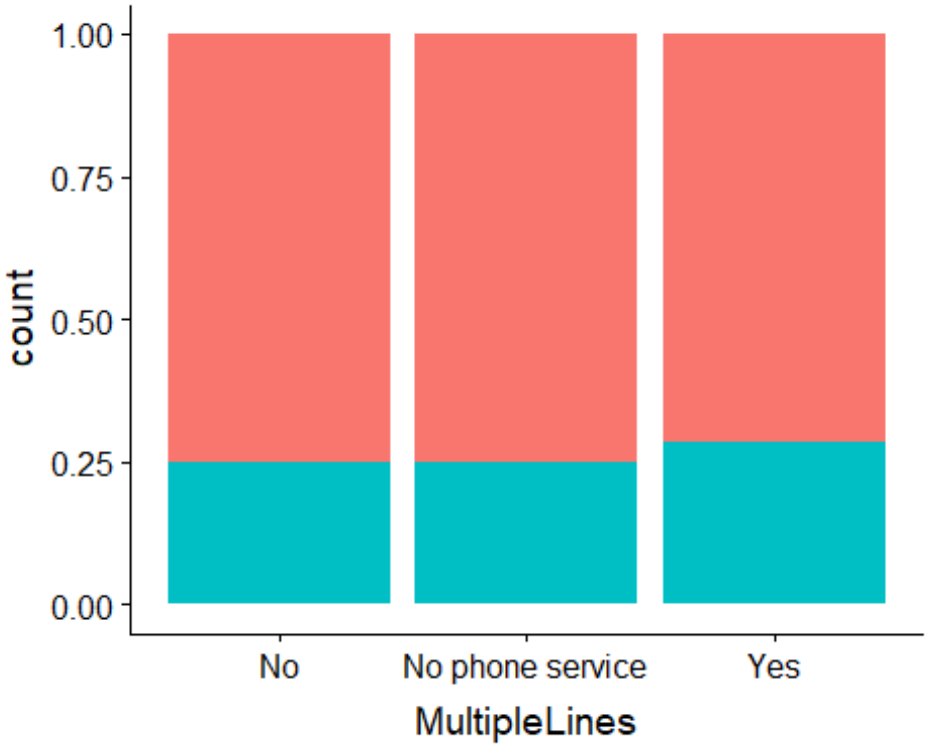

1.00
0.75
0.50
0.25
0.00
count
Female
Male
gender
Churn
No
Yes

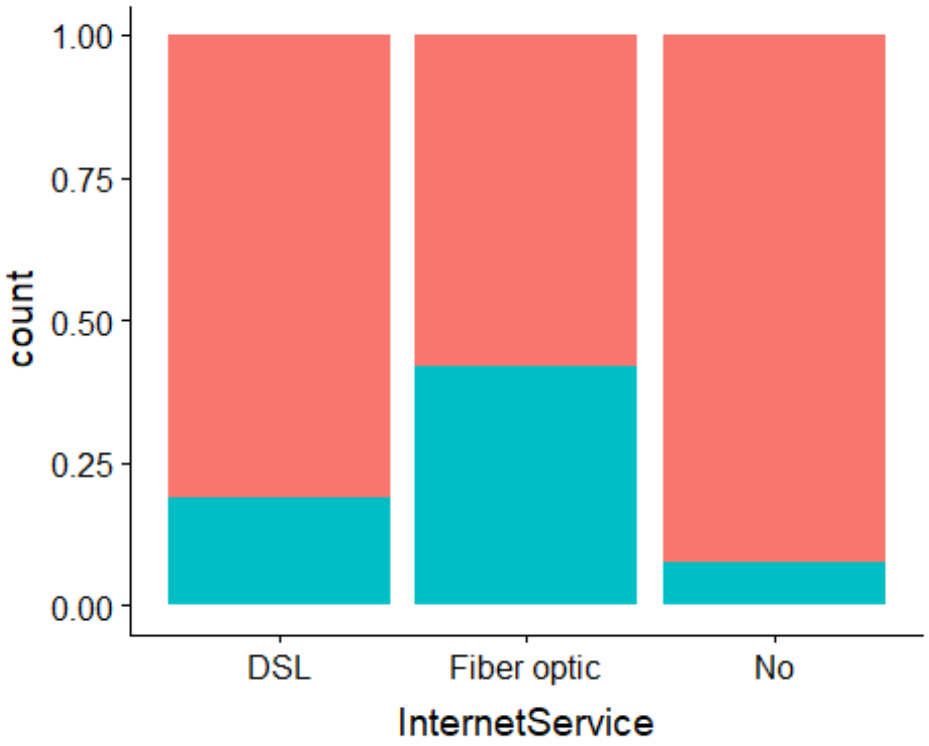

1.00
0.75
0.50
0.25
0.00
count
-0.5
0.0
0.5
1.0
1.5
SeniorCitizen

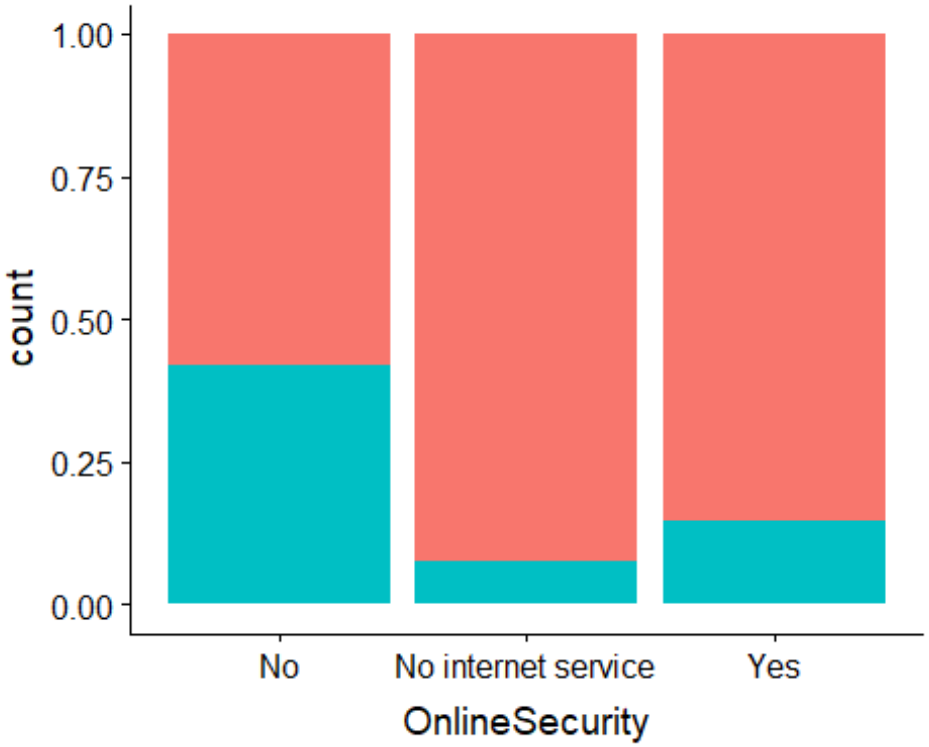

1.00
0.75
0.50
0.25
0.00
count
No
Yes
Partner

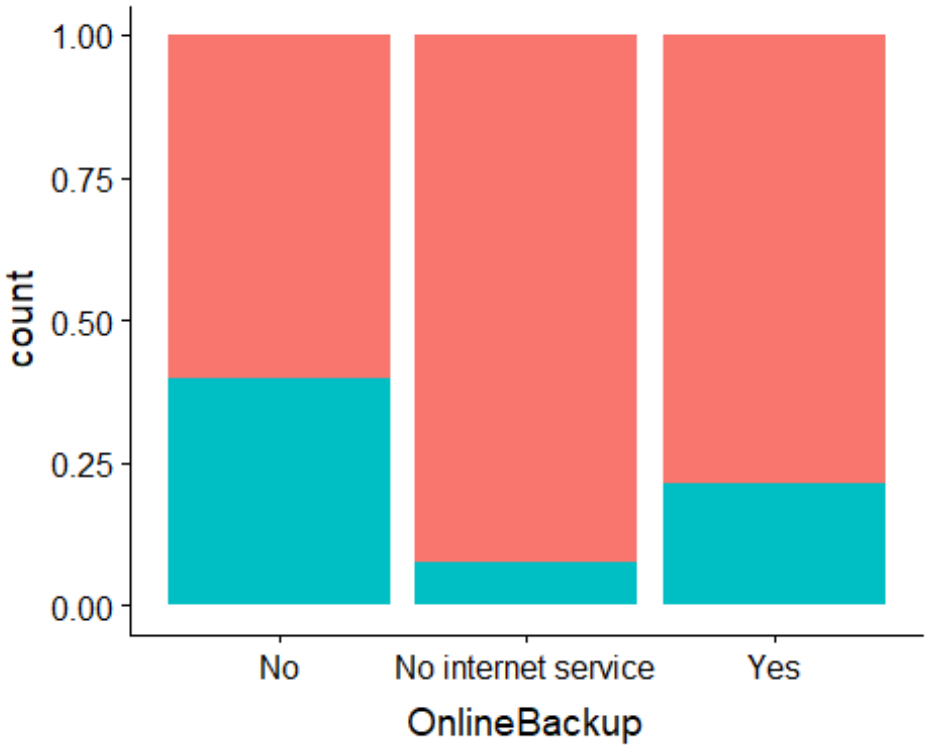

1.00
0.75
0.50
0.25
0.00
count
No
Yes
Dependents

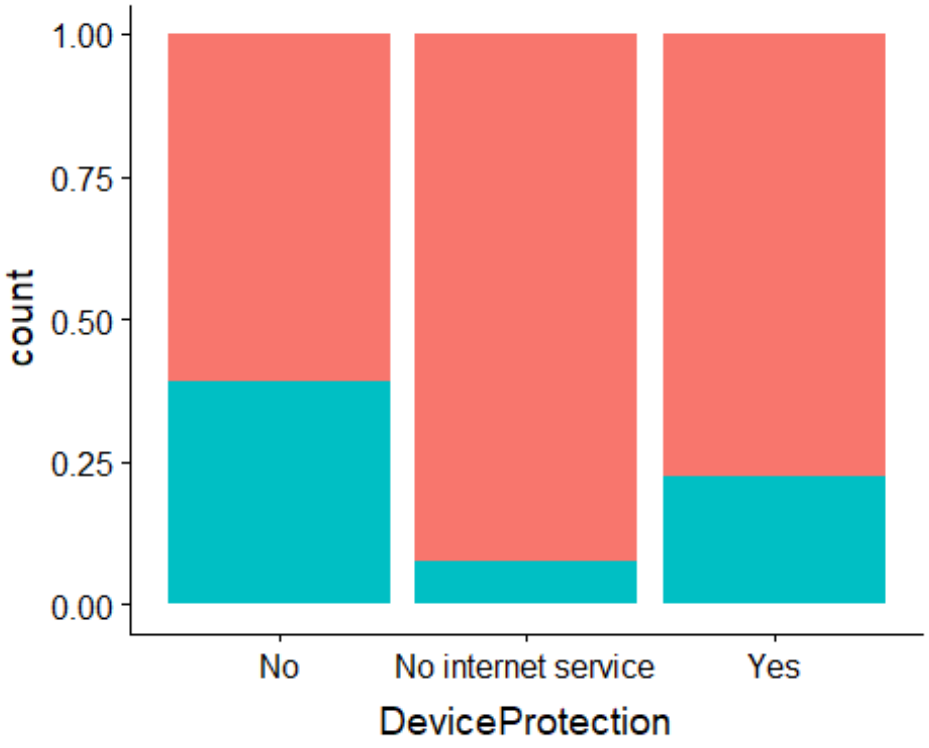

1.00
0.75
0.50
0.25
0.00
count
No
Yes
PhoneService

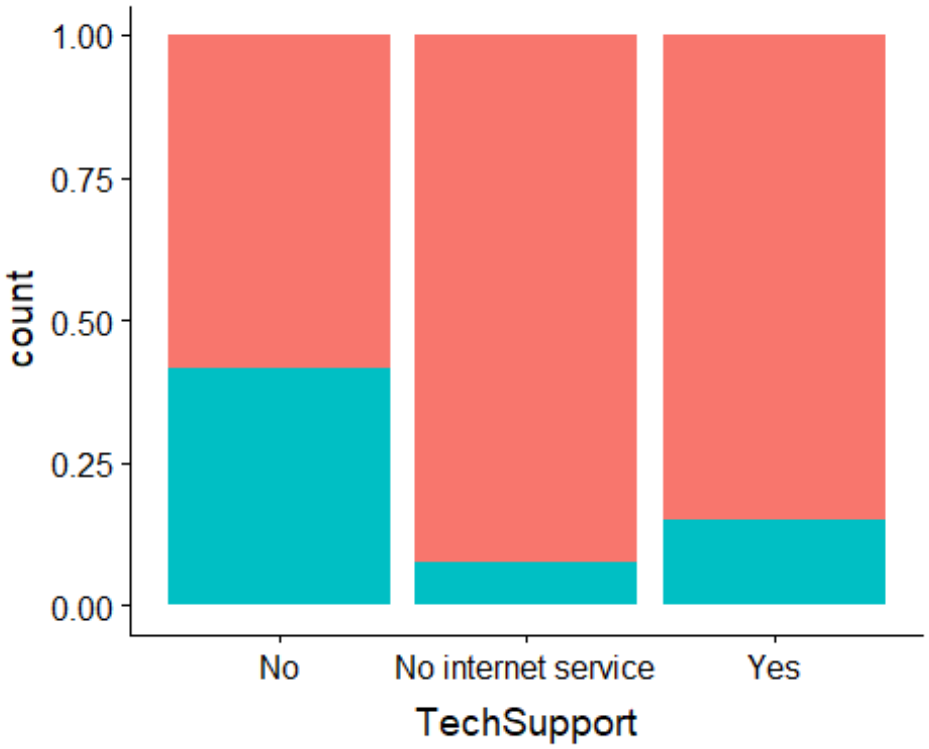

1.00
0.75
0.50
0.25
0.00
count
No
No phone service
Yes
MultipleLines

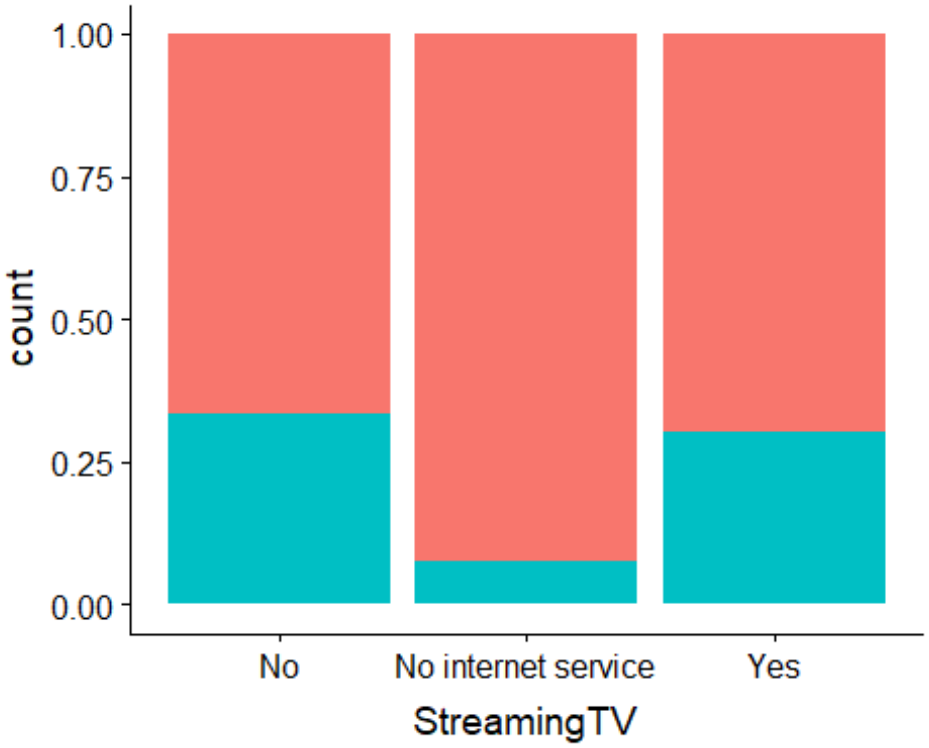

1.00
0.75
0.50
0.25
0.00
count
DSL
Fiber optic
No
InternetService

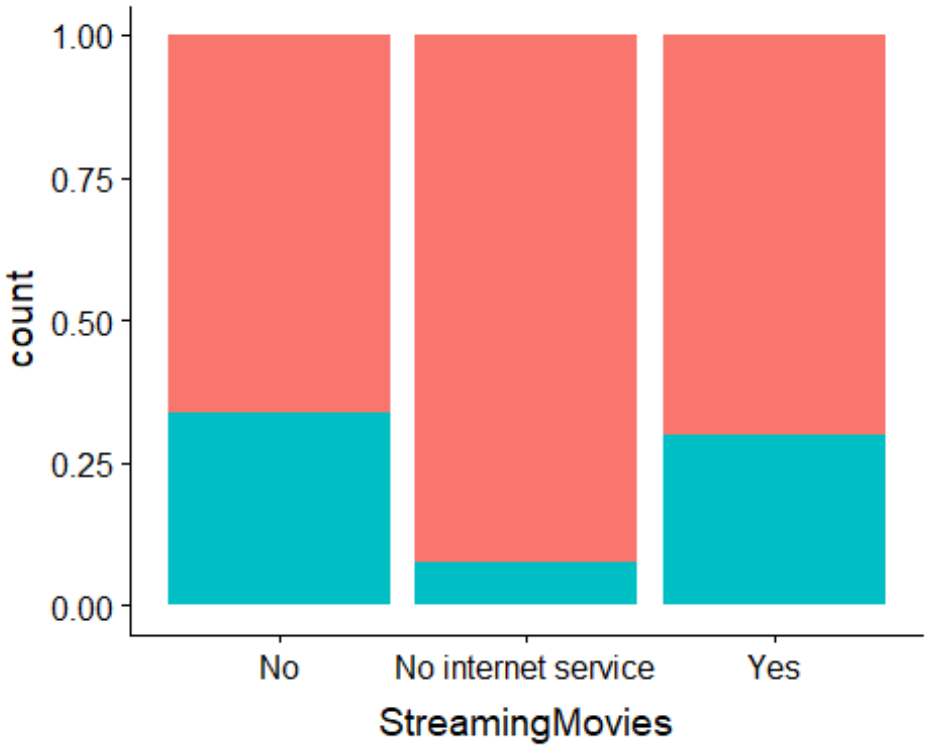

1.00
0.75
0.50
0.25
0.00
count
No
No internet service
Yes
OnlineSecurity

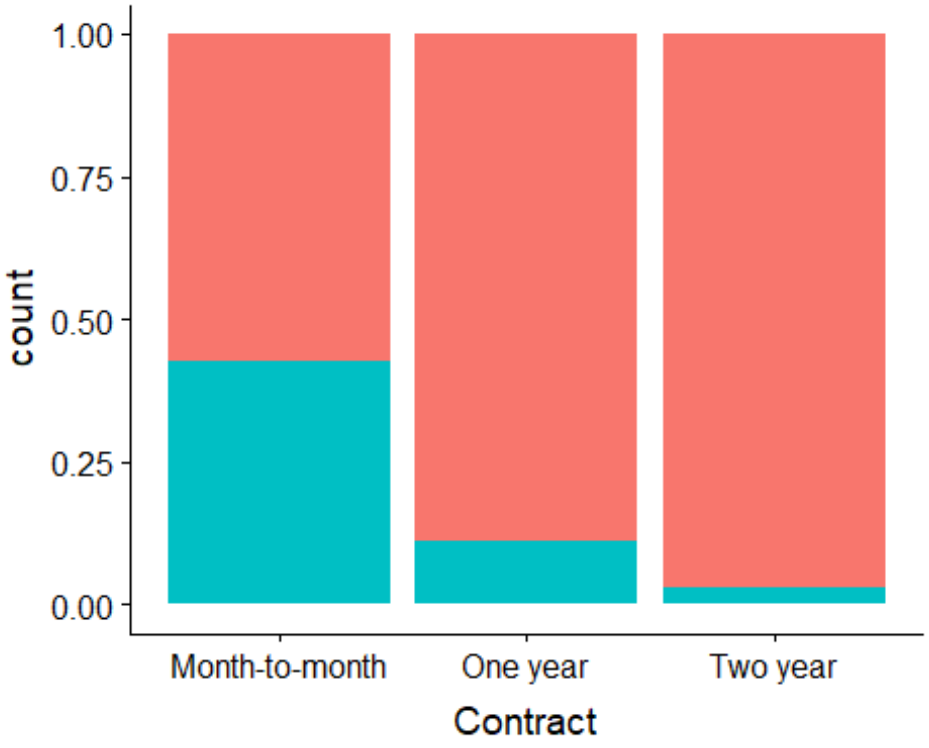

1.00
0.75
0.50
0.25
0.00
count
No
No internet service
Yes
OnlineBackup

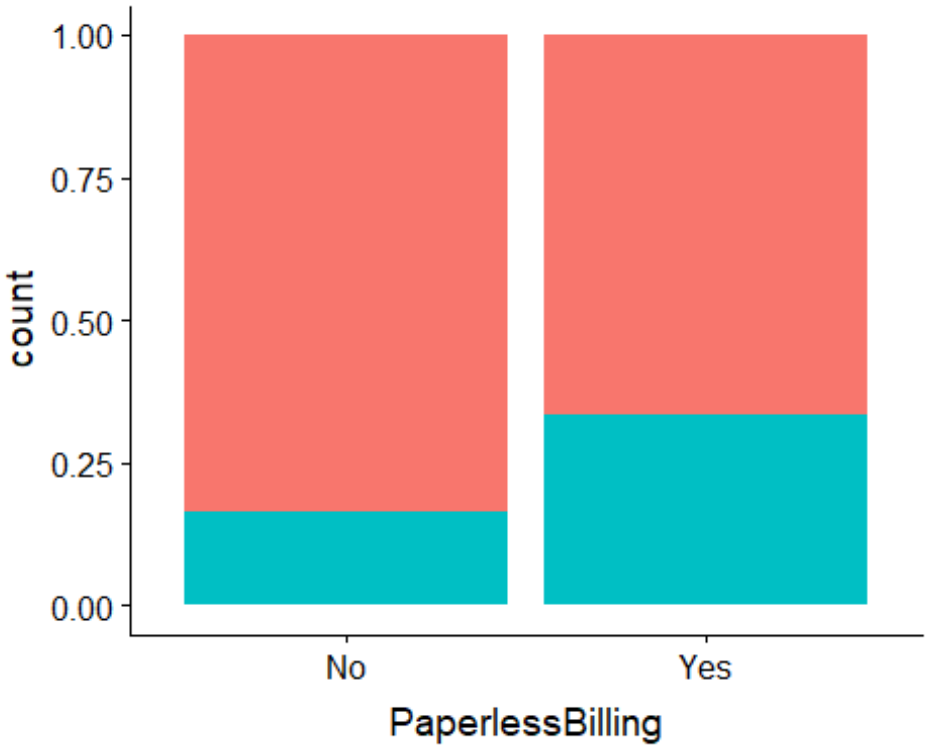

1.00
0.75
0.50
0.25
0.00
count
No
No internet service
Yes
DeviceProtection

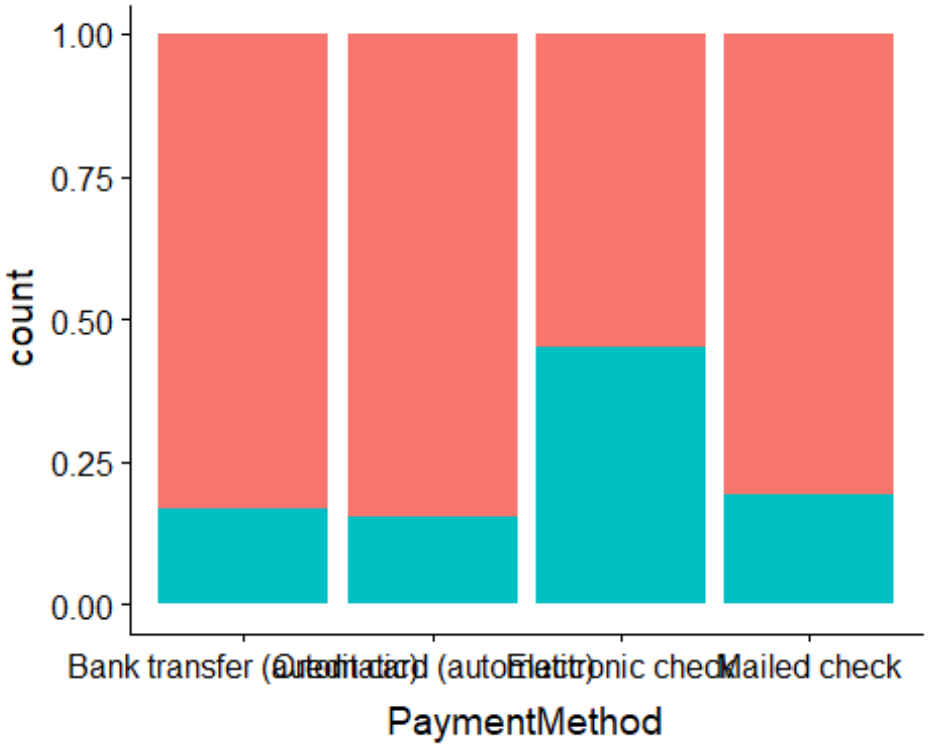

1.00
0.75
0.50
0.25
0.00
count
No
No internet service
Yes
TechSupport

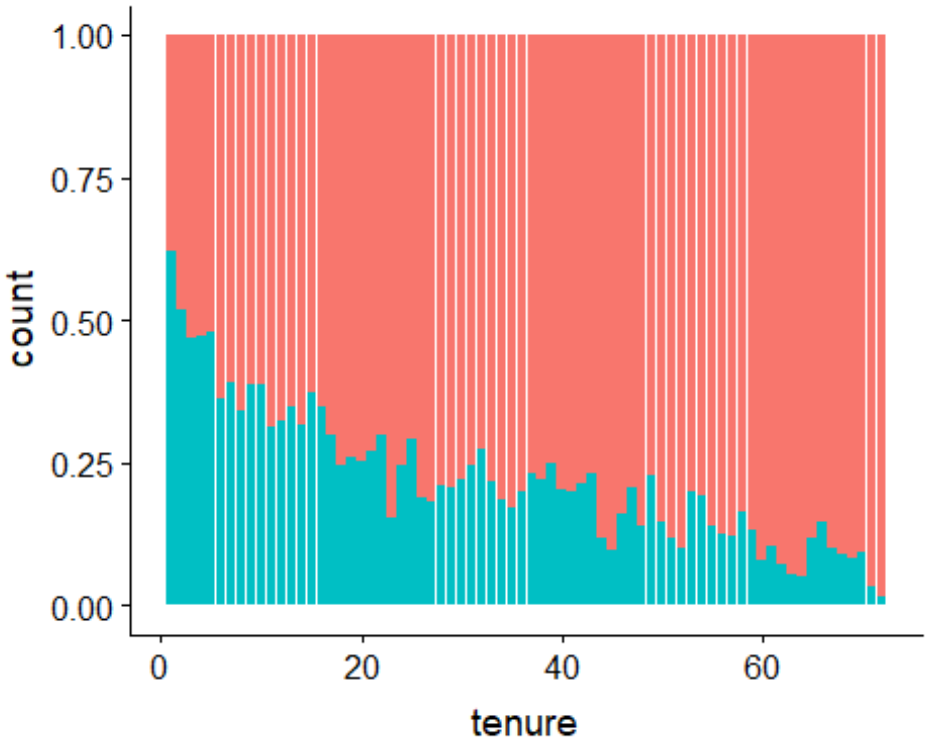

1.00
0.75
0.50
0.25
0.00
count
No
No internet service
Yes
StreamingTV

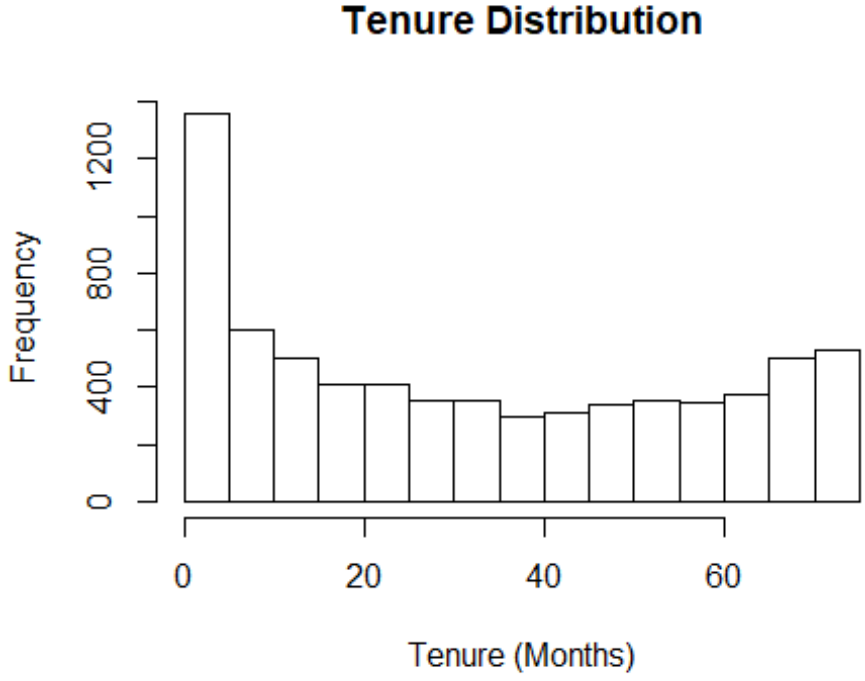

1.00
0.75
0.50
0.25
0.00
count
No
No internet service
Yes
StreamingMovies

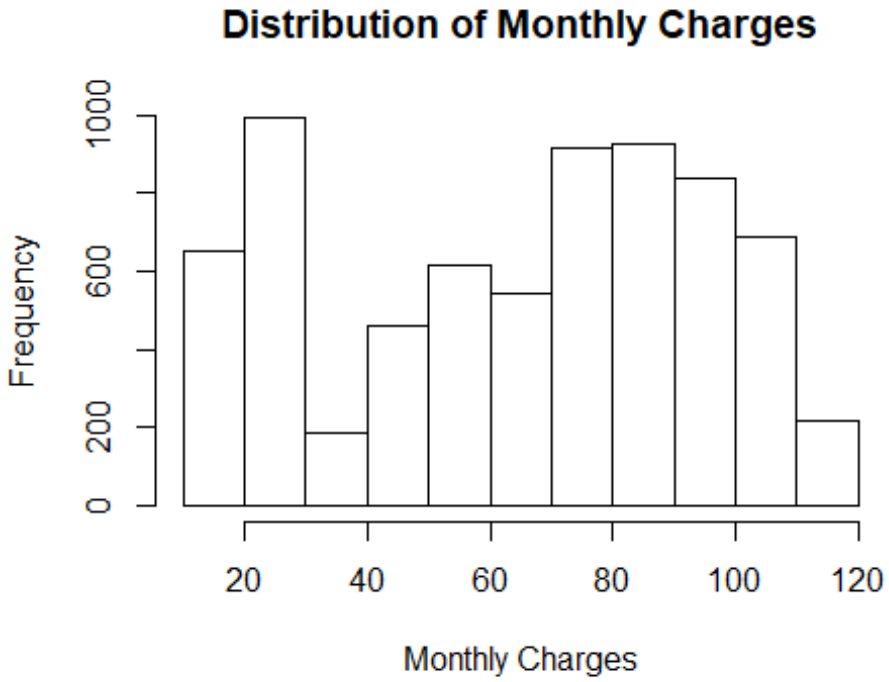

1.00
0.75
0.50
0.25
0.00
count
Month-to-month
One year
Two year
Contract

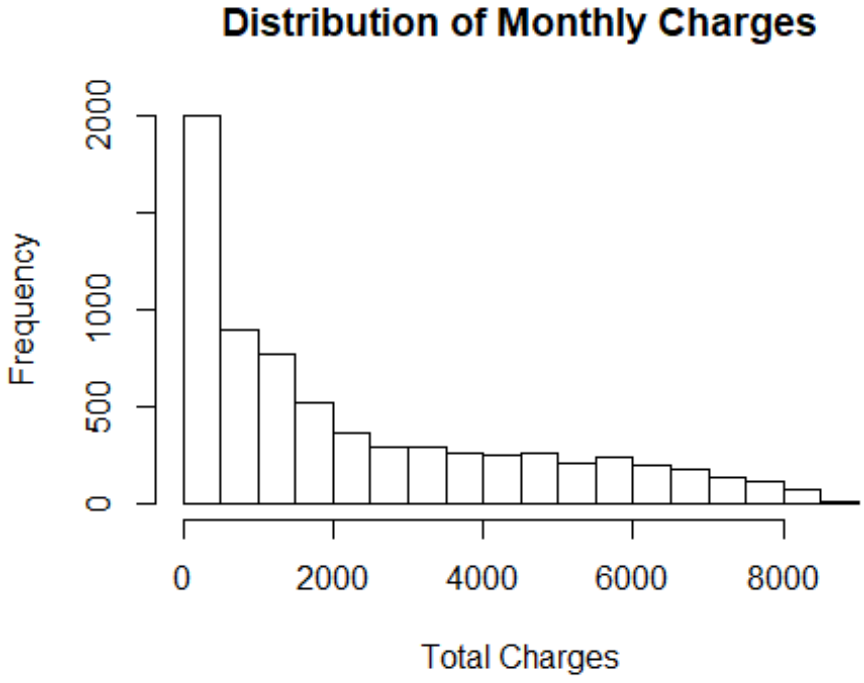

1.00
0.75
0.50
0.25
0.00
count
No
Yes
PaperlessBilling


1.00
0.75
0.50
0.25
0.00
count
Bank transfer (automatic)
Credit card (automatic)
Electronic check
Mailed check
PaymentMethod


1.00
0.75
0.50
0.25
0.00
count
0
20
40
60
tenure


Tenure Distribution
Frequency
0
400
800
1200
0
20
40
60
Tenure (Months)


Distribution of Monthly Charges
Frequency
0
200
600
1000
20
40
60
80
100
120
Monthly Charges


Distribution of Monthly Charges
Frequency
0
500
1000
2000
0
2000
4000
6000
8000
Total Charges