⚠️ Problem Statement

Vodafone wants to analyze its customer churn records and develop a retention strategy. They aim to perform customer churn prediction by analyzing factors such as customer location, internet service type, contract type, and payment method.

🎯 Objectives

Identify Key Drivers: To determine the critical factors (e.g., contract type, tenure, payment method, location) that are most strongly correlated with customers deciding to churn.

Profile High-Risk Customers: To create a clear profile of customers most likely to churn (e.g., Month-to-month contract holders with short tenure who pay via Electronic Check).

Provide Actionable Insights: To translate the data findings into specific, data-backed retention strategies and recommendations for Vodafone's marketing and operations teams.

Data Visualization: To build a comprehensive, interactive Tableau Dashboard that allows management to monitor churn trends and filter performance by location, contract, and demographic.

⚠️ Dataset Overview

This analysis is based on a sample of 7,043 customer records from a telecom provider (Vodafone), We utilize key variables such as the Contract Type, Customer Tenure (time with the company), and Payment Method to identify strong correlations with the outcome variable of Churn.

data
6,647 rows 27 fields — Show Fields

Churn	Contract	Customer ID	Dependents	Device Protection	Gender	Internet Service	Location	Location - Split 1	Multiple Lines	Online Backup	Online Security	Paperless Billing	Payment Method
No	Month-to-month	7590-VHVEG	No	No	Female	DSL	North - New York	New York	No phone service	Yes	No	Yes	Electronic check
Yes	Month-to-month	3668-QPYBK	No	No	Male	DSL	East - Illinois	Illinois	No	Yes	Yes	Yes	Mailed check
No	One year	7795-CFOCW	No	Yes	Male	DSL	West - Illinois	Illinois	No phone service	No	Yes	No	Bank transfer (au
Yes	Month-to-month	9237-HQITU	No	No	Female	Fiber optic	East - Illinois	Illinois	No	No	No	Yes	Electronic check
Yes	Month-to-month	9305-CDSKC	No	Yes	Female	Fiber optic	South - California	California	Yes	No	No	Yes	Electronic check

data
6,647 rows 27 fields — Show Fields

Streaming Movies	Streaming TV	Tech Support	Tenure (group)	%Difference_Female/Male	%Difference_Male/Female	Monthly Charges	Num Admin Tickets	Num Tech Tickets	Senior Citizen	Tenure	Total Charges
No	No	No	1-15 Months	Null	Null	29.850	0	0	0	1	29.85
No	No	No	1-15 Months	Null	Null	53.850	0	0	0	2	108.15
No	No	Yes	31-45 Months	Null	Null	42.300	0	3	0	45	1,840.75
No	No	No	1-15 Months	Null	Null	70.700	0	0	0	2	151.65
Yes	Yes	No	1-15 Months	Null	Null	99.650	0	0	0	8	820.50

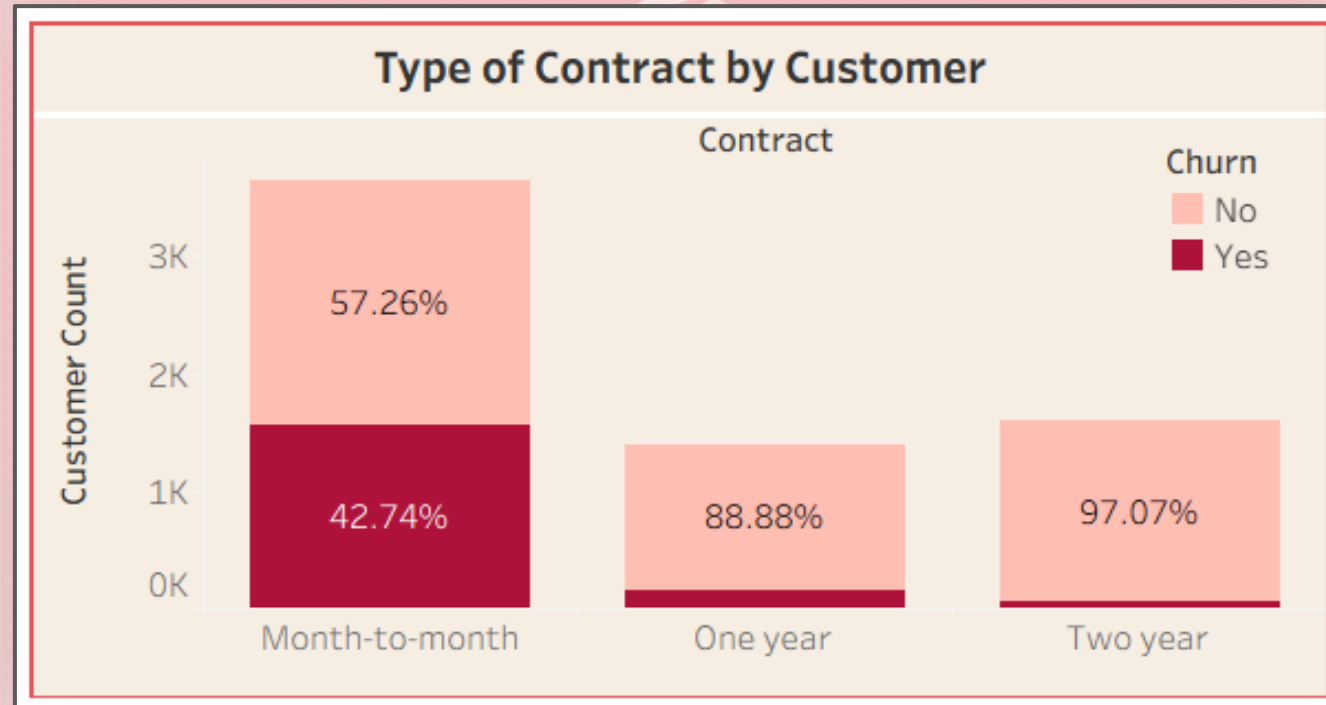## ⚠ Key Findings

1. Month-to-month contract subscribers have a very high likelihood of churning while longer-term contracts have more customer loyalty.

- 42.74 % of customers on a Month-to-month contract churned.
- Whereas only 11.12% of customers on a One Year contract and 2.93% on a Two-Year contract churned within their group

⚠ Key Findings

2. Customers are most likely to leave very early in their relationship highlighting a major issue with onboarding or initial service satisfaction.

- The 1-15 Months tenure group is the largest segment and shows the highest overall churn volume of around 38.84%
- As tenure increases, the segment size and the proportional churn risk significantly decrease.
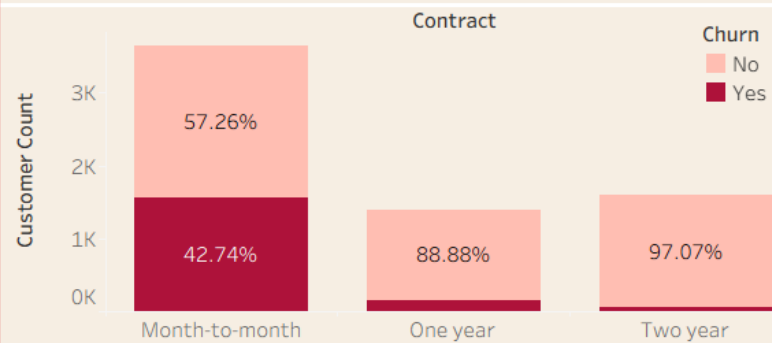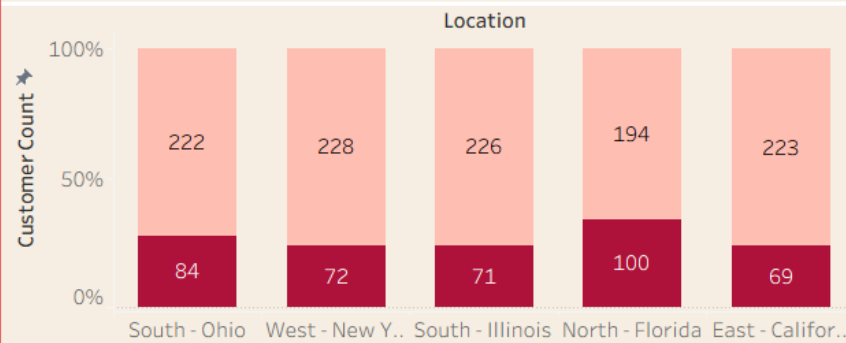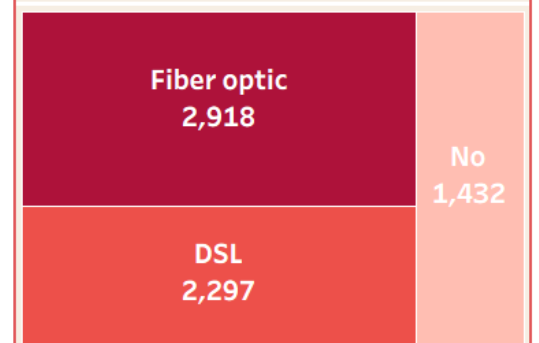
Customer Count by Tenure

- 61-75 Months 20.14%
- 1-15 Months 34.84%
- 46-60 Months 14.68%
- 31-45 Months 13.62%
- 16-30 Months 16.71%