



# TELECOM CUSTOMER CHURN ANALYSIS

Created by: Huỳnh Bảo Minh | Data Source: Kaggle

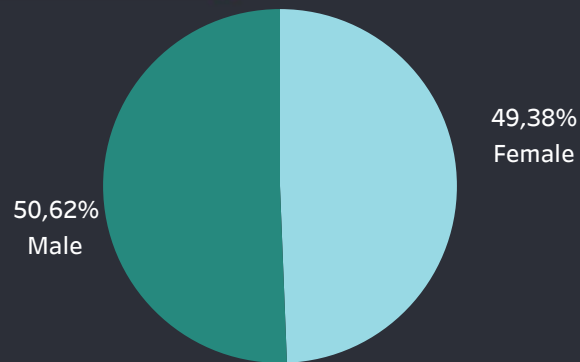
# OVERVIEW

Total Revenue  
21.371.132

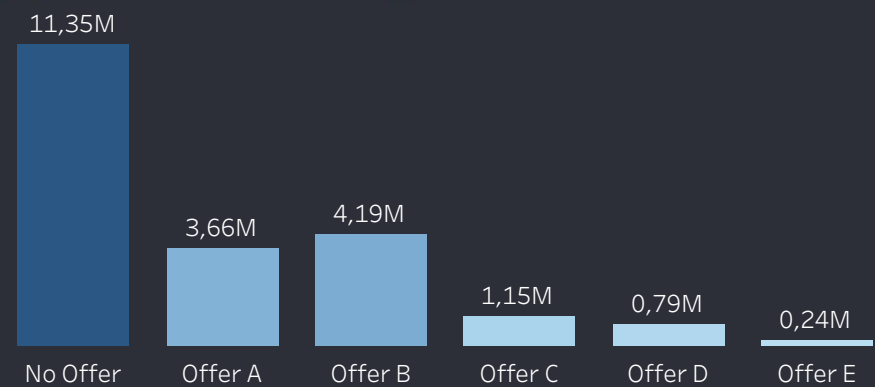
# of Customers  
7.043

# of Churned Customers  
1.869

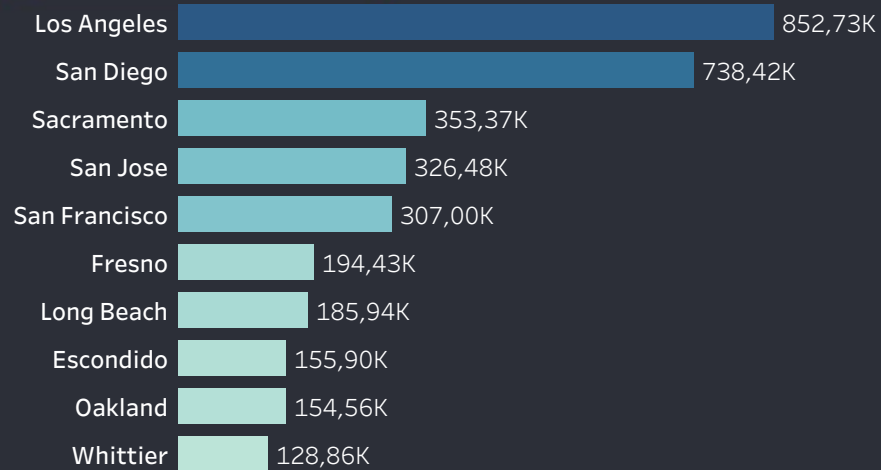
## Revenue by Gender



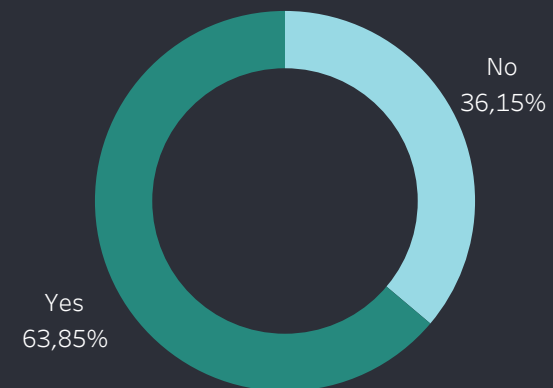
## Revenue by Offer



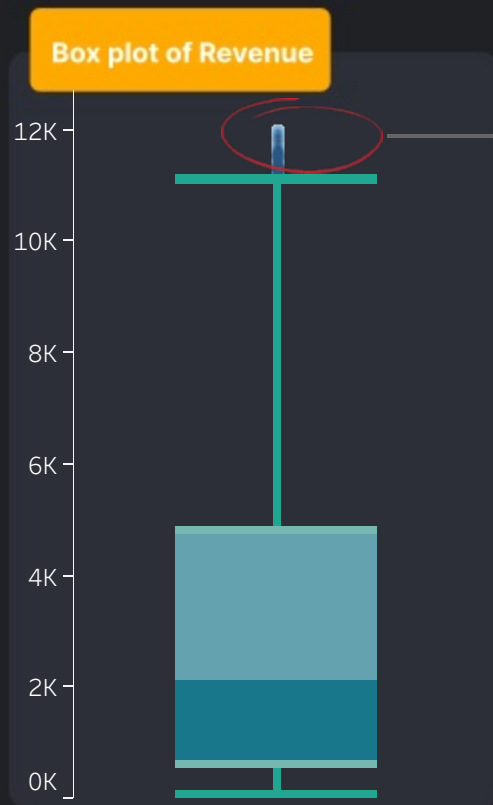
## Top 10 Cities by Revenue



## Revenue by Married



# High-Value Customers

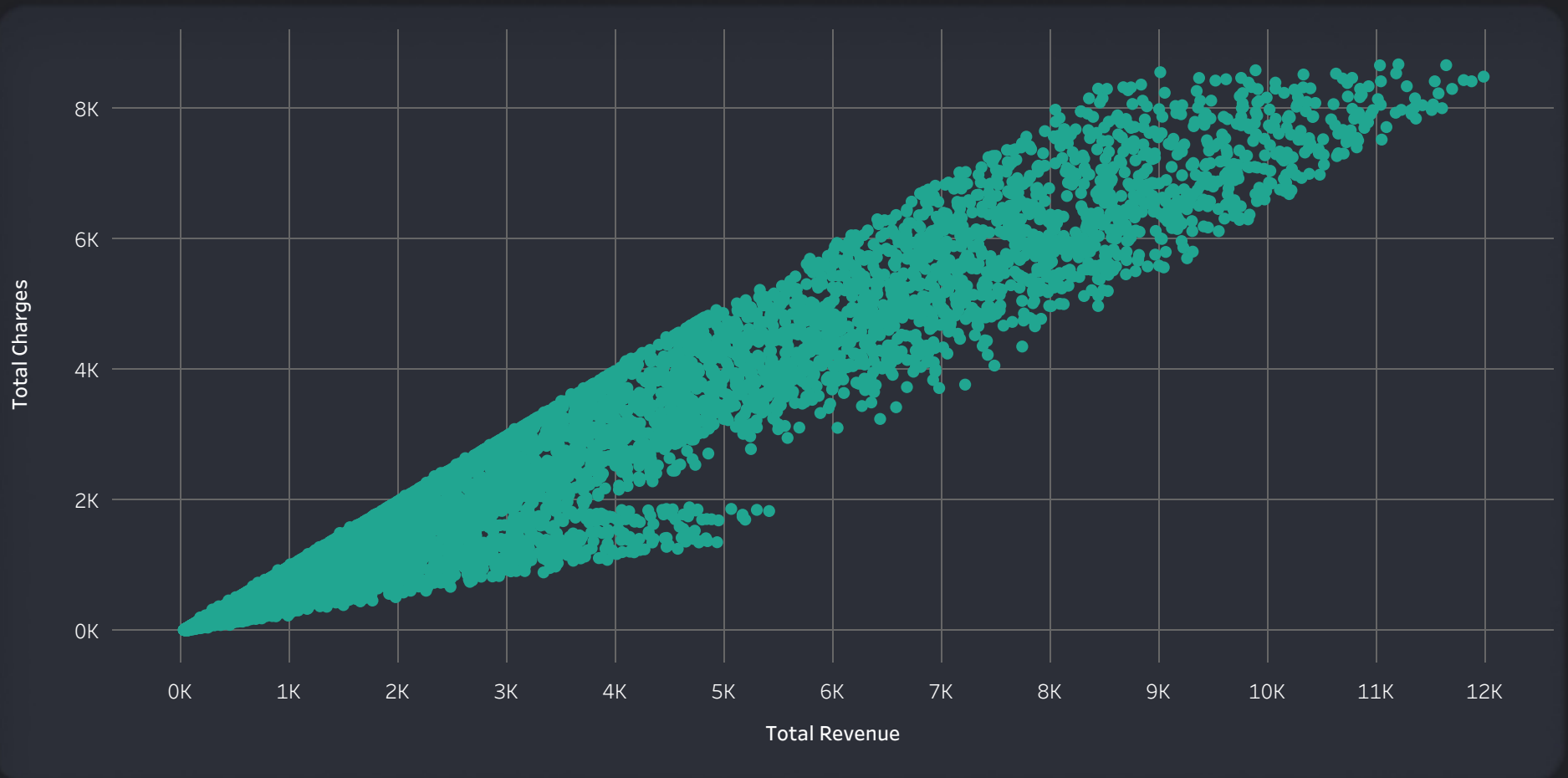


Revenue **outliers** identify a distinct segment of **VIP customers** with significantly higher spending.

## VIP Customers

Customer ID	Gender	Age	Offer	Total Revenue
0164-APGRB	Female	56	Offer A	11.979,3
0536-ACXIP	Female	34	No Offer	11.347,5
0619-OLYUR	Male	32	No Offer	11.514,8
0907-HQNTS	Female	74	Offer A	11.221,6
2380-DAMQP	Female	63	No Offer	11.272,2
2469-DTSGX	Female	72	Offer A	11.169,8
2889-FPWRM	Male	31	No Offer	11.195,4
3508-CFVZL	Female	55	Offer A	11.501,8
3810-DVDQQ	Female	28	No Offer	11.688,9
3963-RYFNS	Female	25	Offer A	11.597,0
5451-YHYPW	Female	75	Offer A	11.795,8
5914-XRFQB	Male	58	No Offer	11.529,5
5945-AZYHT	Male	53	Offer A	11.355,9
7030-FZTFM	Male	31	Offer A	11.315,8
7569-NMZYQ	Female	33	No Offer	11.634,5
7602-MVRMB	Female	62	No Offer	11.416,2
8029-XYPWT	Male	72	Offer A	11.340,8
8263-QMNTI	Male	46	Offer A	11.868,2

## Total Charges Vs Total Revenue



Total Charges and Total Revenue exhibit **a strong positive linear** relationship. This confirms that revenue is largely driven by accumulated charges, with refunds introducing moderate variability but not disrupting the overall trend.

# Churn Analysis

**26,54%** of total customers have discontinued their contracts.

Top 3 churn reasons include:

**Competitor had better devices (16.75%) - Competitor made better offer (16.6%) - Attitude of support person (11.8%)**

## Why Customers Churn ?

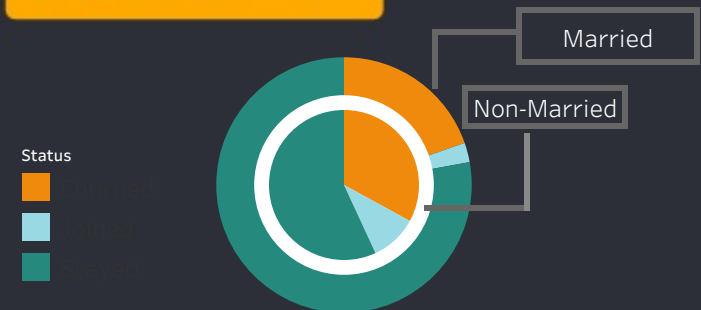
### Churn Reason

Competitor had better devices  
Competitor made better offer  
Attitude of support person  
Don't know  
Competitor offered more data  
Competitor offered higher download speeds  
Attitude of service provider  
Price too high  
Product dissatisfaction  
Network reliability  
Long distance charges  
Service dissatisfaction  
Moved  
Extra data charges  
Limited range of services  
Poor expertise of online support  
Lack of affordable download/upload speed  
Lack of self-service on Website  
Poor expertise of phone support  
Deceased

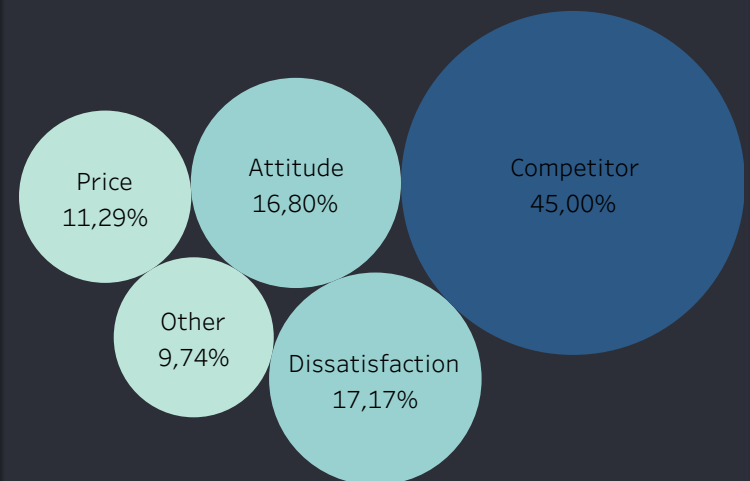
0 100 200 300

Num of Customers

## Churned by Married



## Churned by Categories



# Churn Analysis

## Churned by Customer Status and Tenure Category

Tenure Category	Customer Status	
1 - 6 Months	Churned	784
	Joined	454
	Stayed	232
7 - 12 Months	Churned	253
	Stayed	463
1 - 2 Years	Churned	294
	Stayed	730
2 - 3 Years	Churned	180
	Stayed	652
3 - 4 Years	Churned	145
	Stayed	617
4 - 5 Years	Churned	120
	Stayed	712
5 - 6 Years	Churned	93
	Stayed	1.314

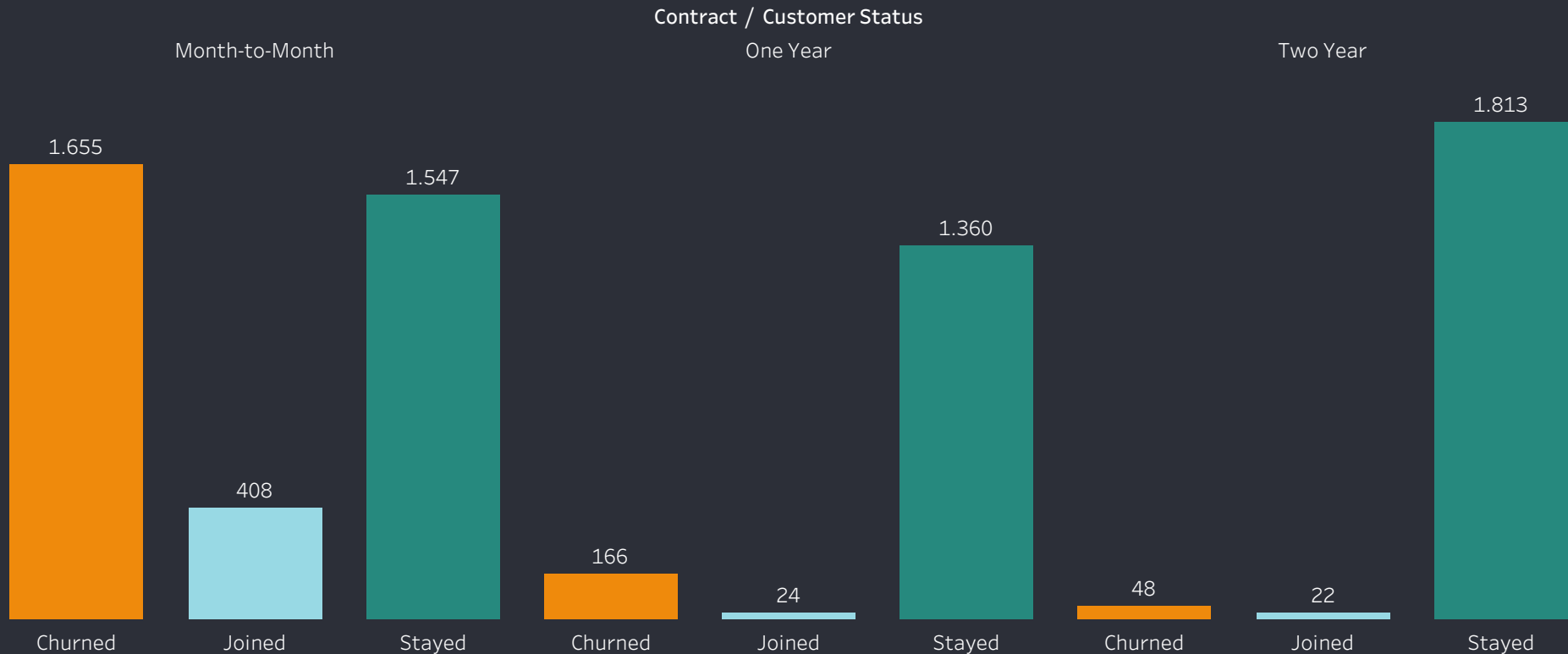
**Churning Customers:** Most of the churning customers has only subscribed to the telecom company for a period of 1-6 months. The number of churning customers significant decreases for customers with longer tenure of months than 1-6 months, and it can also be seen that the trend is constantly decreasing for churning customers from 1-2 years to 5-6 years.

**Staying Customers:** Most of the staying customers which consists of 1314 customers have already subscribed to the telecom company for 5-6 years. There is no clear trend as the data for staying customers of 1-2 years to 4-5 years only ranges around 617-730 customers, before the sharp increase to 1314 customers for customers with 5-6 years subscribed.

**Joining Customers:** All joining customers fall into the 1-6 months category, where it can be seen that all the customers are only subscribed to the telecom company for 3 months or less as a result from querying the data.

# Churn Analysis

## Churned by Contract



**Month-to-Month Contract Popularity:** It can be seen that **88.55%** of the churned customers are subscribed to the telecom company on a month-to-month contract, whereas the remaining 8.88% customers are subscribed on one-year contracts (166 customers) and 2.57% are subscribed on two-year contracts (48 customers).

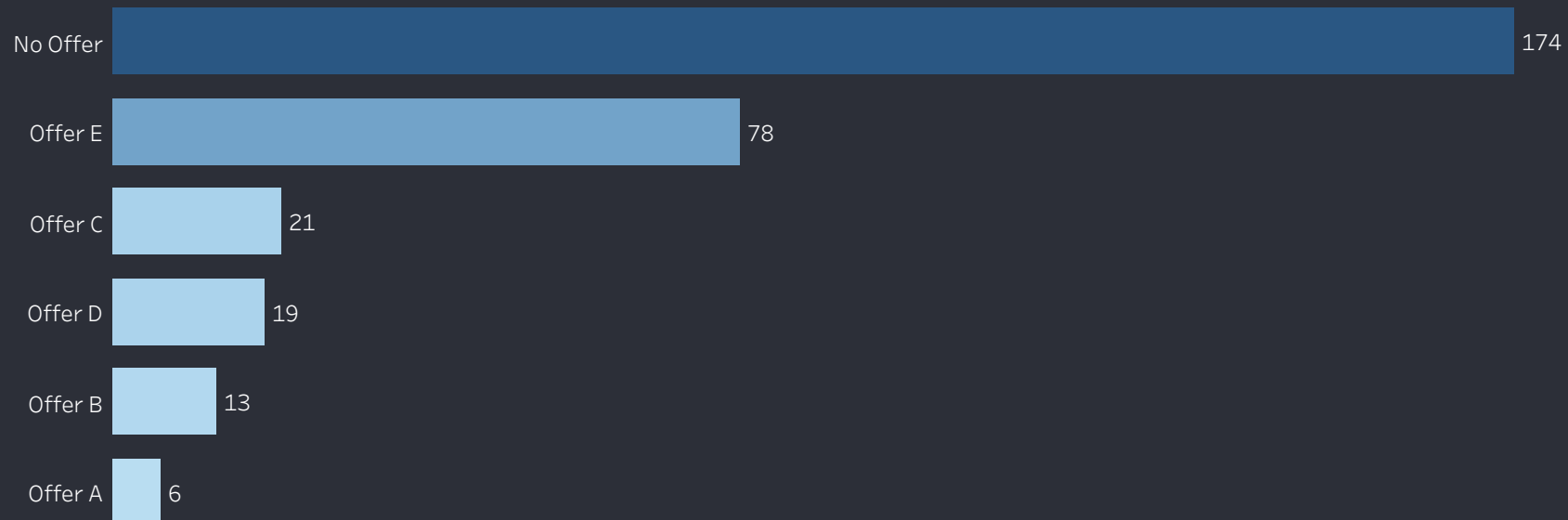
**Importance of Flexibility:** With month-to-month contracts, it is seen that month-to-month contracts are the main choice for customers so that they are more free to cancel their subscription switch providers if certain expectations of the phone/internet services by the customers offered are not achieved.



# Churn Analysis

## Churn reason: Competitor made better offer

### Churned by Offer



**Majority Without Offers:** For churned customers who received better offers by competitors, it is found that **56%** of the customers did not subscribe to any existing promotions/offers from the company.

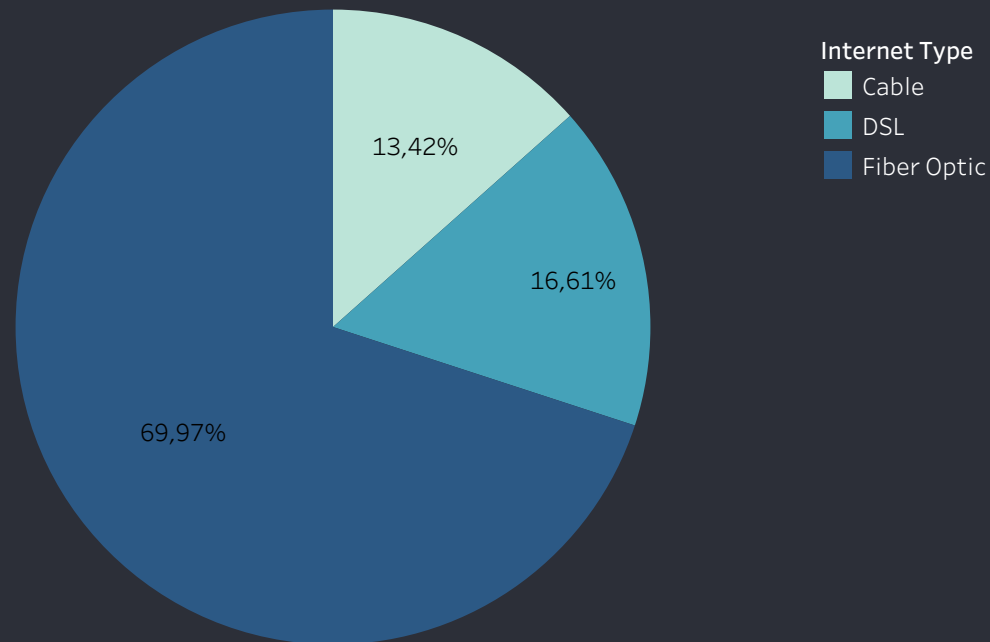
**Offer E Ranked Highest in Churn Rate** across All Offers: For those who did subscribe to offers, 25.1% of the customers of this churn reason subscribed to Offer E, whereas the remaining subscribed to other offers. Therefore, all the offers especially Offer E **should be reviewed** on the features offered so that it appeals to customers and maintain its competitiveness in the telecom market.



# Churn Analysis

Churn reason: Competitor had better devices

Churned by Internet Type

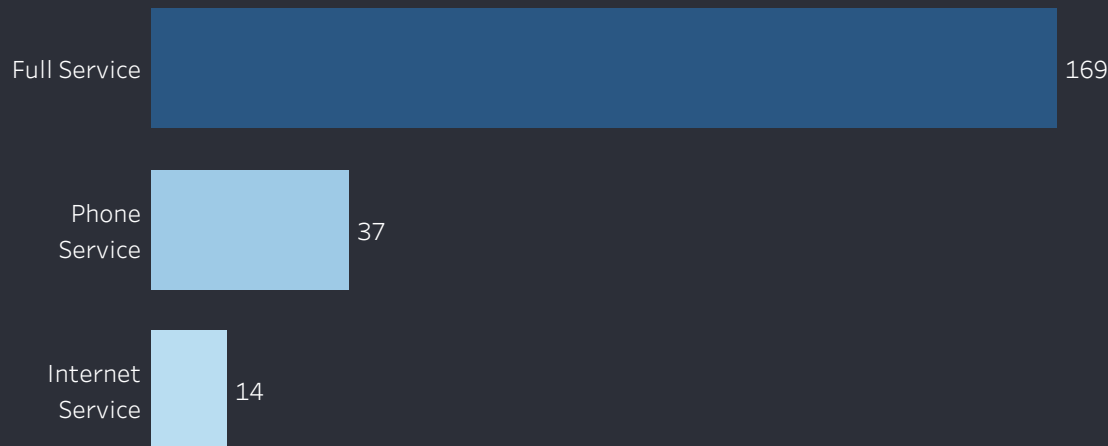


**Popularity of Internet Types:** From the data observed above, it is seen that **70%** of the churning customers who got offered better devices from competitors use the fastest type of internet, which is the **fiber optic**, whereas the remaining 16.6% subscribes to DSL internet and 13.4% subscribers to cable internet.

# Churn Analysis

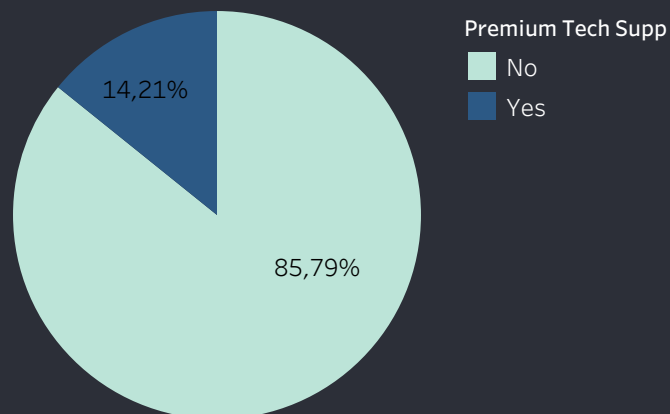
## Churn reason: Attitude of support person

### Churned by Service Type



**Bad attitude** of support staff **not at specific department:** The findings above indicate that the attitude of support staff is not strongly related to only a single department (phone service of internet service department).

### Churned by Premium Technical Support



**4.21% of Premium Tech Support subscribers** churned because of the support staff's attitude, which is **unsatisfactory** given that they paid a premium for this service.

## CONCLUSION

### Key Revenue Insights

**Offer B** leads in total revenue.

**Married customers** generate **63.8%** of revenue.

Top 5 countries: **Los Angeles - San Diego - Sacramento - San Jose - San Francisco**

### Churn Customer Insights

Churn is highest among customers with **1-6 months tenure**.

**No-offer customers** account for **56.2%** of churn.

**Offer E** leads in churn among offered plans.

### Competitive Churn Drivers

Churn Category: **Competition - Dissatisfaction - Attitude - Price**

Top 3 Churn Reason : **Competitor had better devices - Competitor made better offer - Attitude of support person**

## ACTIONABLE RECOMMENDATIONS

### Offer Benefits Review

**Redesign high-churn offers (especially Offer E)** to improve customer retention.

**Maintain and enhance top-performing offers (Offer B, A)** to sustain revenue growth.

### Customer Growth & Retention Strategies

**Marketing Schemes for Offers** to drive customer acquisition and reduce early-stage churn.

**Implement reward programs** to retain long-term customers and increase customer lifetime value.

**Choice of High-Quality Devices Offered**

**Training Programs for Support Staff**