

Introduction

Customer Churn, often referred to as customer attrition or customer turnover, is a critical metric for businesses across various industries. It represents the percentage of customers who discontinue using a company's products or services within a given period. Churn is a significant concern for organizations as it can result in the loss of revenue and the need to acquire new customers to replace those who have departed.

Understanding the reasons behind customer churn and identifying at-risk customers is vital for any business. It provides an opportunity to implement strategies to improve customer retention, enhance the customer experience, and ultimately increase revenue.

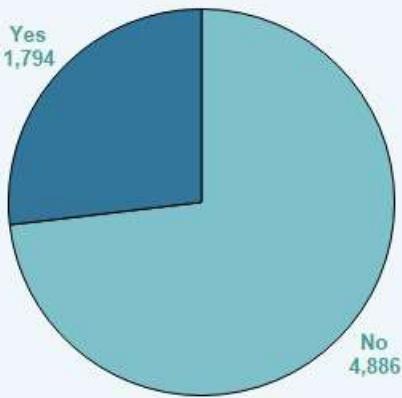
Churn analysis typically involves examining customer data, such as usage patterns, purchase history, and demographic information. By analyzing this data, businesses can identify trends and patterns that contribute to customer churn. This information can then be used to develop targeted retention strategies, such as personalized offers, improved customer service, and loyalty programs. Additionally, companies may use machine learning algorithms to predict which customers are most likely to churn and take proactive steps to挽留 them.

Current Situation

Databel, a prominent service provider, currently grapples with a significant churn rate across its customer base. The data reveals a churn rate of approximately 63% in Canada and 26% across all states. This alarming trend has raised essential questions about the reasons behind customer attrition and which specific customer segments are more prone to churn.

The high churn rate represents a critical challenge that requires immediate attention. To address this challenge effectively, we initiated an in-depth data analysis project aimed at uncovering the root causes of churn. By understanding why customers are leaving and which types of customers are most likely to churn, Databel can develop and implement strategies to retain its customer base.

This analysis serves as a crucial step in Databel's journey to reduce churn and enhance customer retention. By identifying the factors driving churn, Databel can formulate targeted strategies to address these issues, improve the overall customer experience, and ultimately foster business growth..



Churn Reason Analysis

Churn Reasons

Extra data charges
Limited range of services
Lack of affordable download/upload speed
Service dissatisfaction

Price too high

Competitor offered higher download speeds

Competitor offered more data

Attitude of support person

Attitude of service provider
Product dissatisfaction
Network reliability
Don't know
Poor expertise of online support

Competitor had better devices

Churn Reason:

Count of Churn Reason: 297

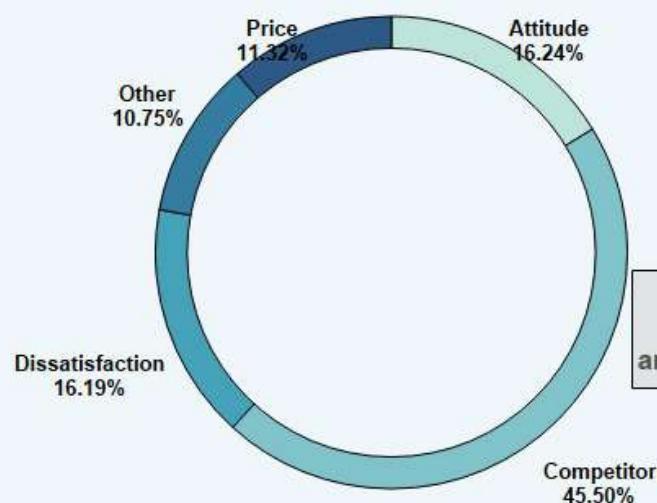
Competitor had better devices

Deceased
Long distance charges

Offer

Out of air churn reasons,
churn due to competitor's ser..

Churn Category Distribution



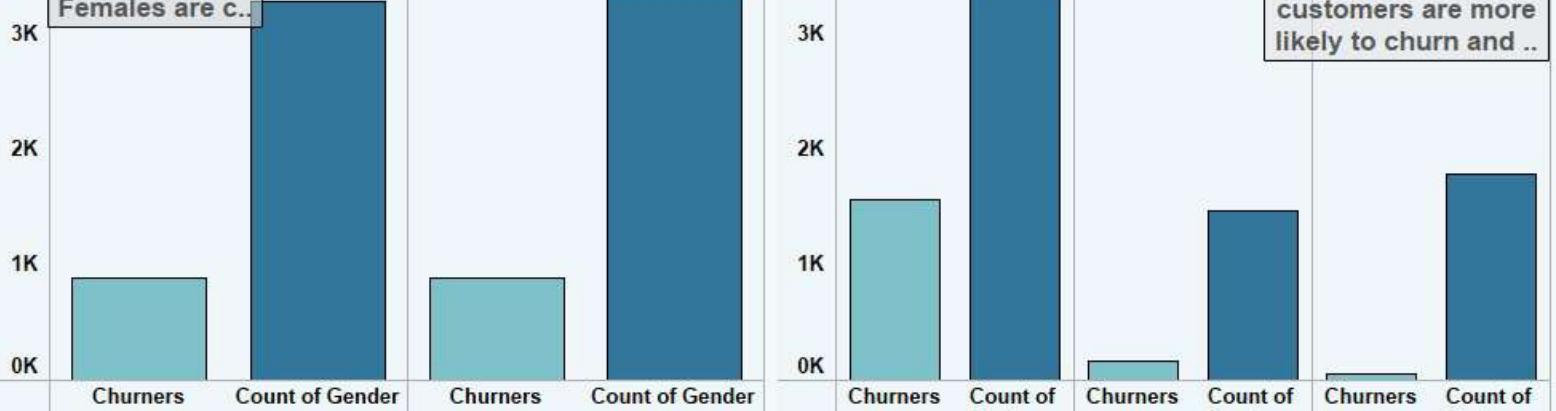
Competitor holds the major
percentage of churn, we need to
analyse competitor's services a..

Demographic Analysis of Churners

Count of Gender(Churned)

Female

Males and Females are c...



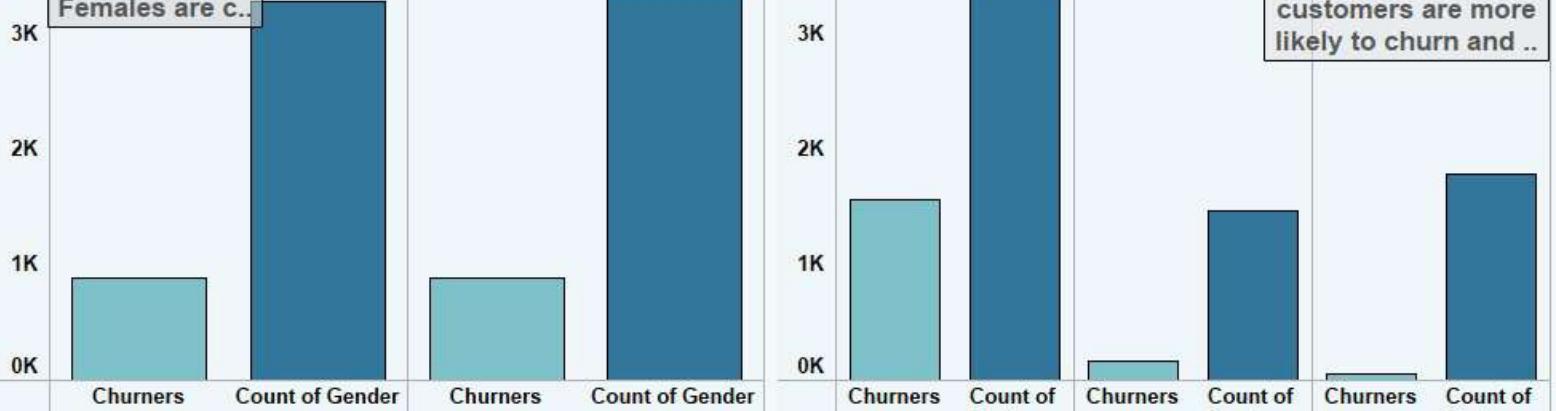
Count of Contract(Churned)

Month-to-Month

One Year

Two Year

Monthly contract customers are more likely to churn and ...

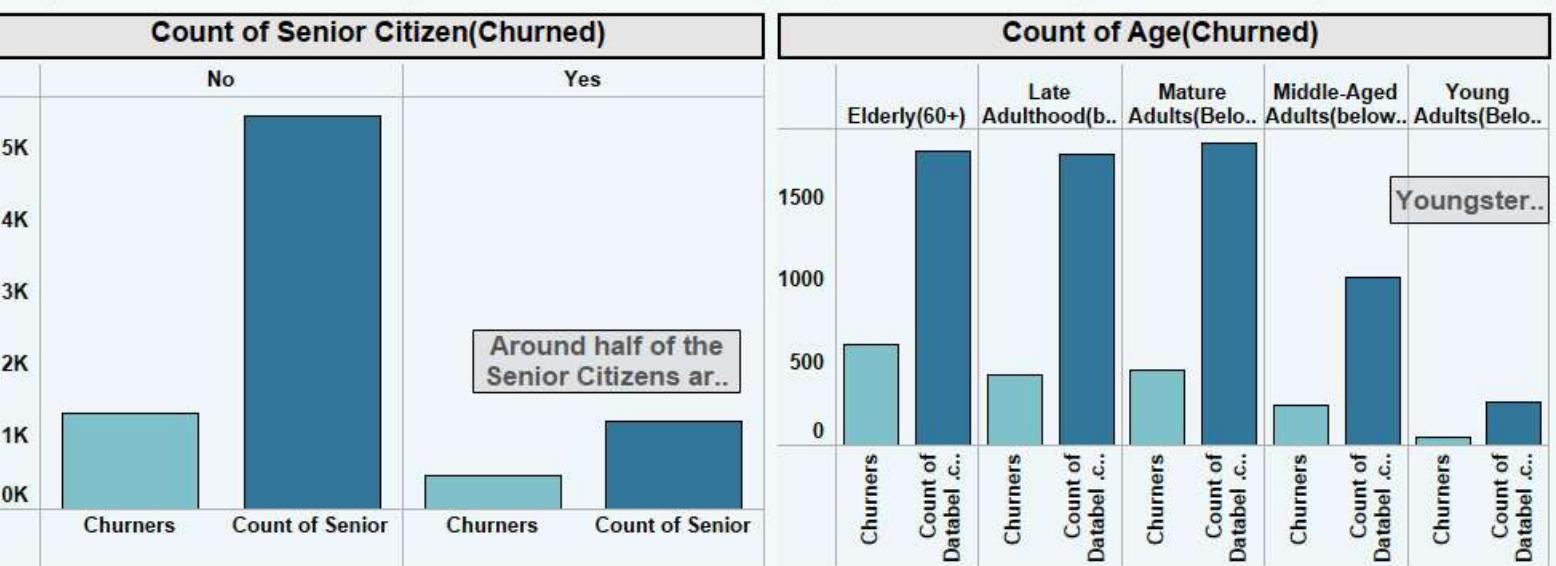


Count of Senior Citizen(Churned)

No

Yes

Around half of the Senior Citizens ar...



Count of Age(Churned)

Elderly(60+)

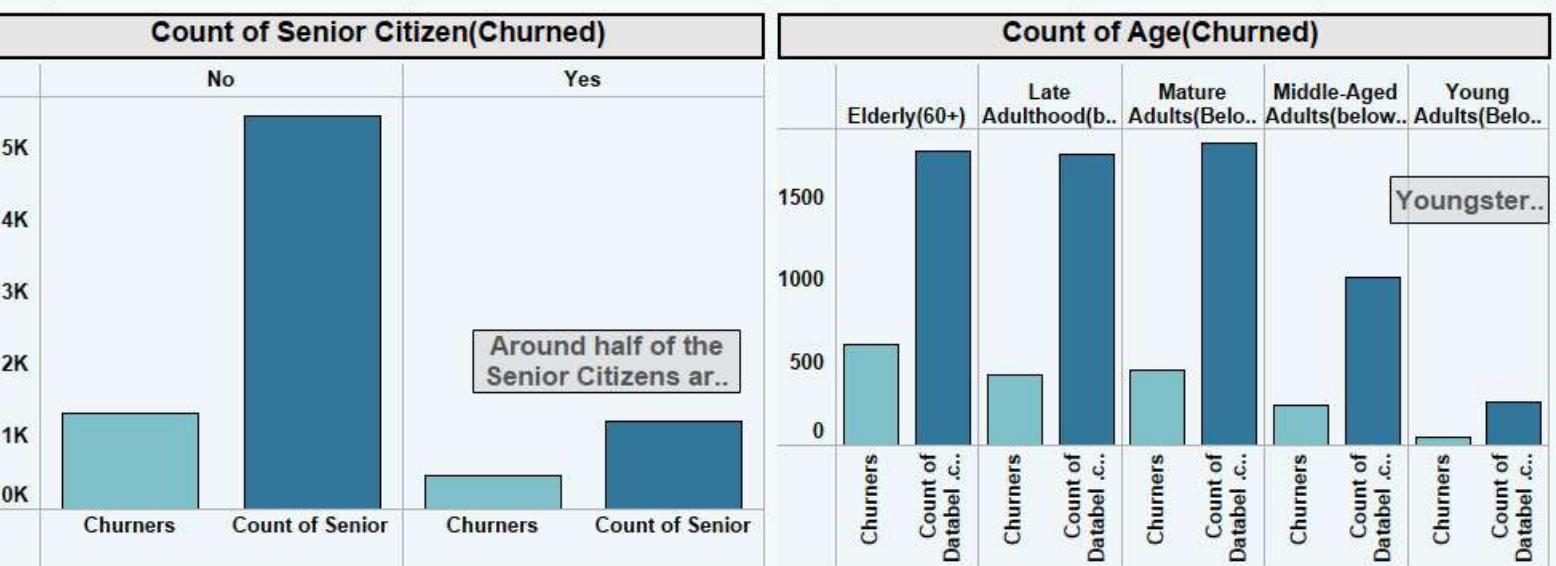
Late Adulthood(b..)

Mature Adults(Belo..)

Middle-Aged Adults(below..)

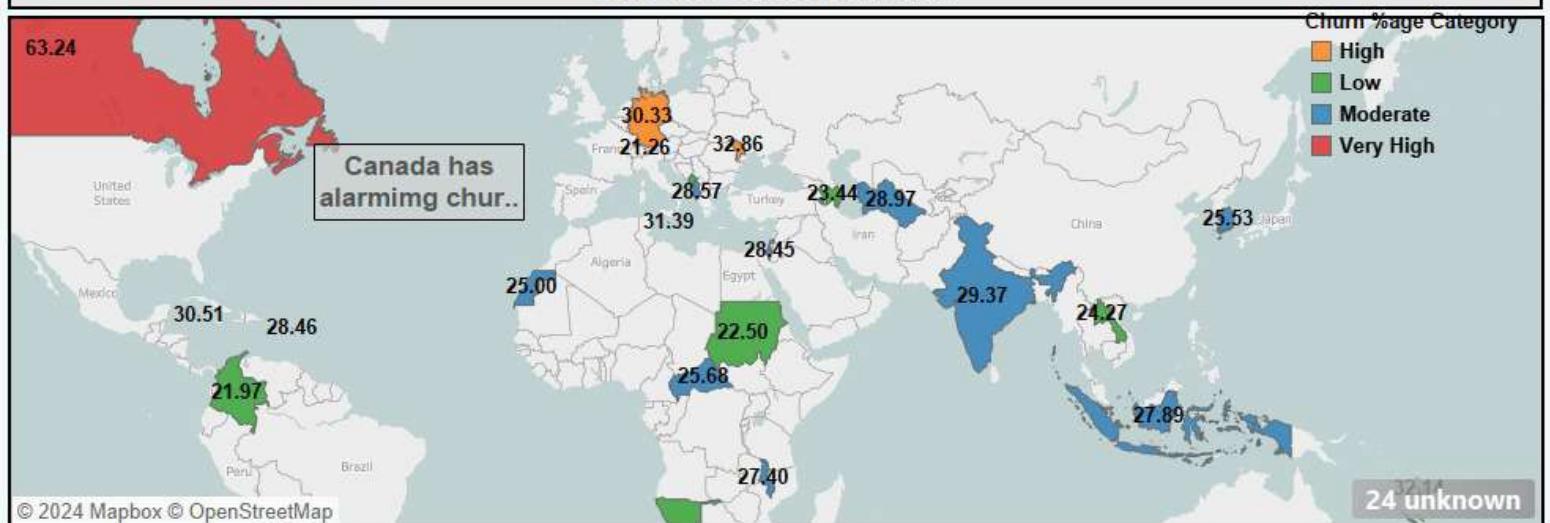
Young Adults(Belo..)

Youngster...



Geographical Analysis

State wise Churn Distribution

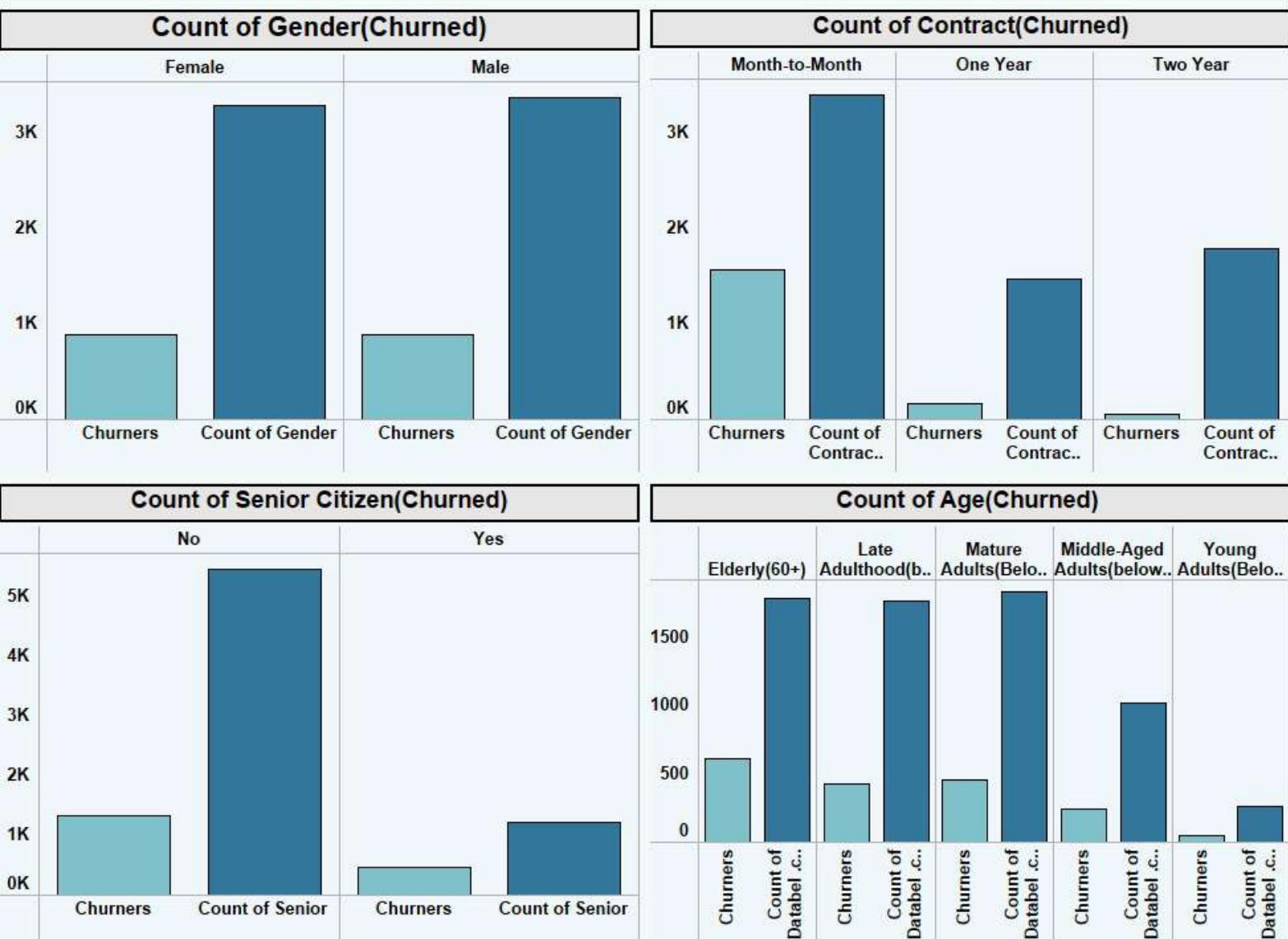


Top 10 Churn States		Top 10 Retention States		Top 10 States by Customers	
State	Churn %	State	Retention %	State	Customers
CA	63.24%	DE	69.67%	WV	213
OH	34.81%	KY	69.49%	MN	167
PA	33.71%	OR	69.03%	NY	167
NE	33.06%	MT	68.61%	AL	161
MD	32.86%	NH	67.86%	OH	158
NH	32.14%	MD	67.14%	WI	156
MT	31.39%	NE	66.94%	OR	155
OR	30.97%	PA	66.29%	VA	155
KY	30.51%	OH	65.19%	WY	154
DE	30.33%	CA	36.76%	CT	148

State-wise Count of Grouped Customers									
WV	ID	KS	CO	ND	NV	MT	CT	TX	
IN	OR	WA							
MD	OK	VA	MI	NC	NH	NM	HI	KY	
NJ	WY	IL	MO						
NY	MN	UT	AK	NE	SD	AZ			
WI	AL	MA	IA	AR			SC	VT	DE
		ME	DC	FL	GA			PA	
		RI	MS	TN	OH			LA	

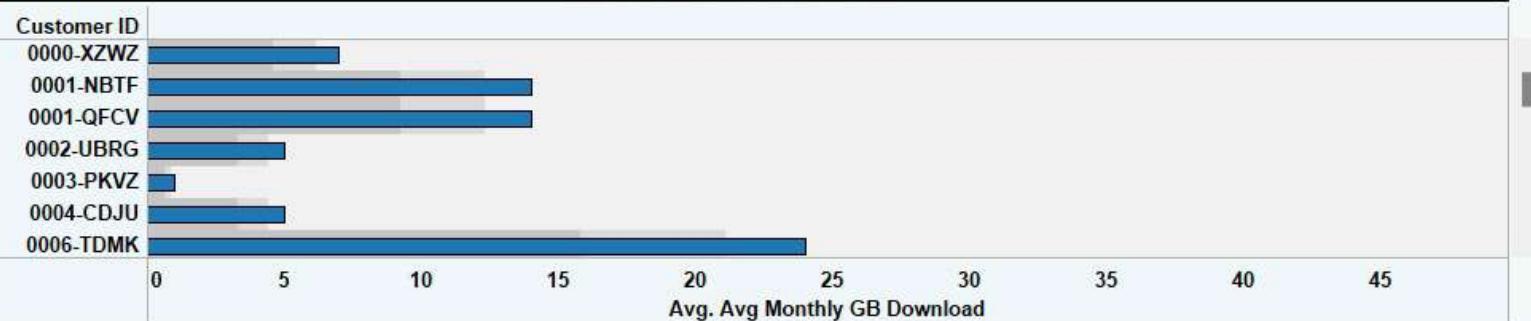
Grouped customers have very low churn rates. In case of Canada, it has lowest number of grouped customers, so high..

Demographic Analysis of Churners

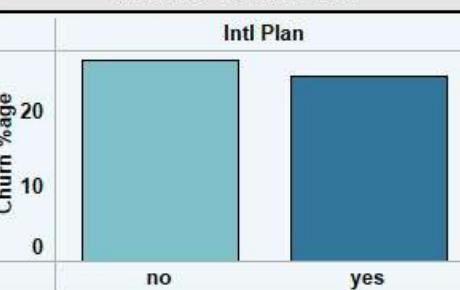


Service Analysis

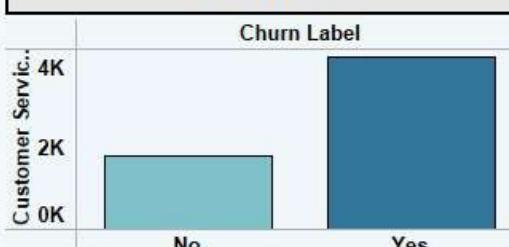
Avg. Monthly GB Download



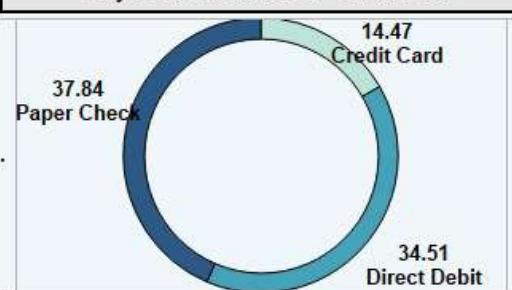
Churn% vs Intl Plan



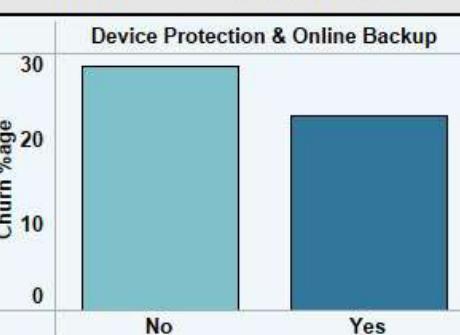
Customer Service calls of Churners and Non-Churners



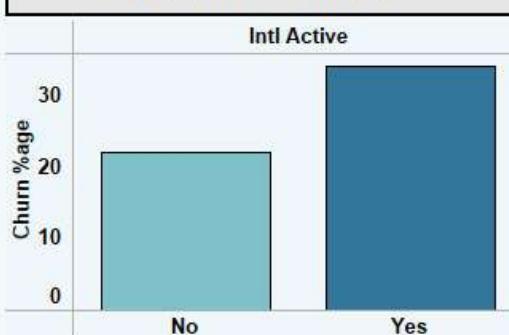
Payment Method & Churn %



Churn% vs Device Protection



Intl Active Customers



Churn% vs Unlimited Data Plan



State-wise Count of Grouped Customers

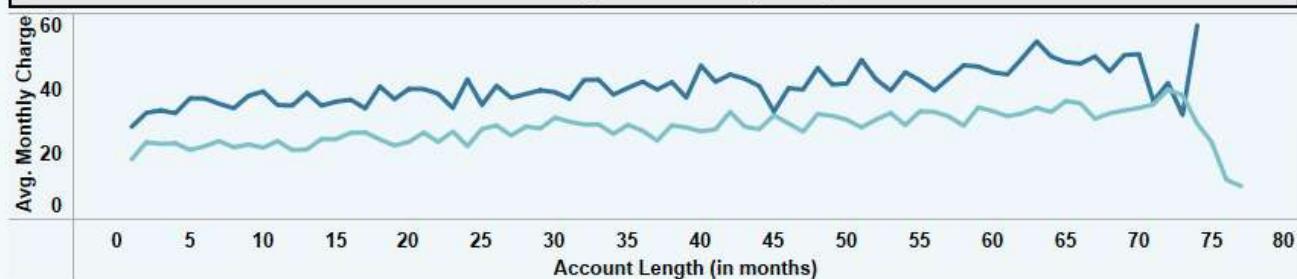
WV	ID	KS	CO	ND	NV	MT	CT	TX
IN	OR	WA	MI	NC	NH	NM	HI	KY
MD								
NJ	WY	UT						
NY	MN	MA	IA	AR	SD	AZ		
WI	AL	ME	DC	FL	SC	VT	DE	
		RI	MS	TN	GA	PA	LA	
					OH			

Grouped customers have very low churn rates. In case of Canada, it has lowest number of grouped customers, so high..

Service Analysis



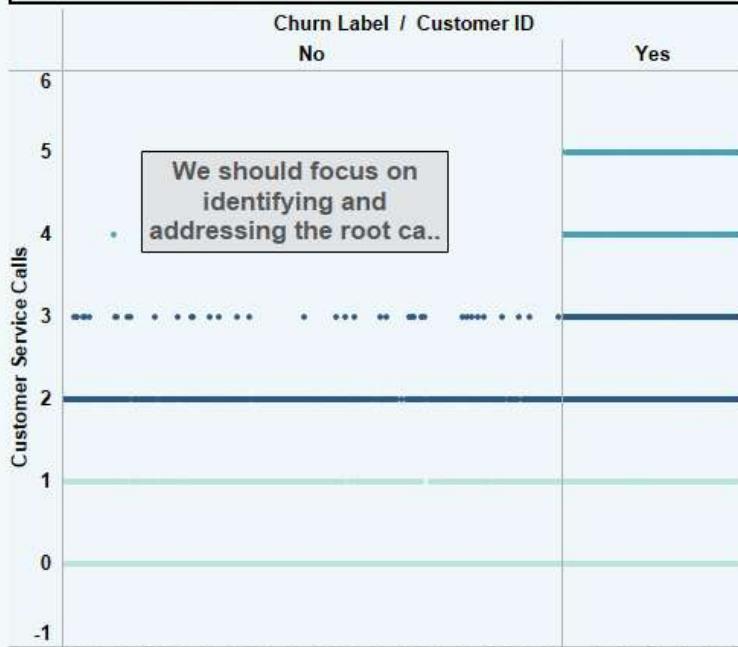
Account length vs Monthly charges



This shows variation of account length..

Customer Service Calls vs Churn

Churn Label / Customer ID



Tenure vs churn

Churn Label / Customer ID

