



# DATAIKU

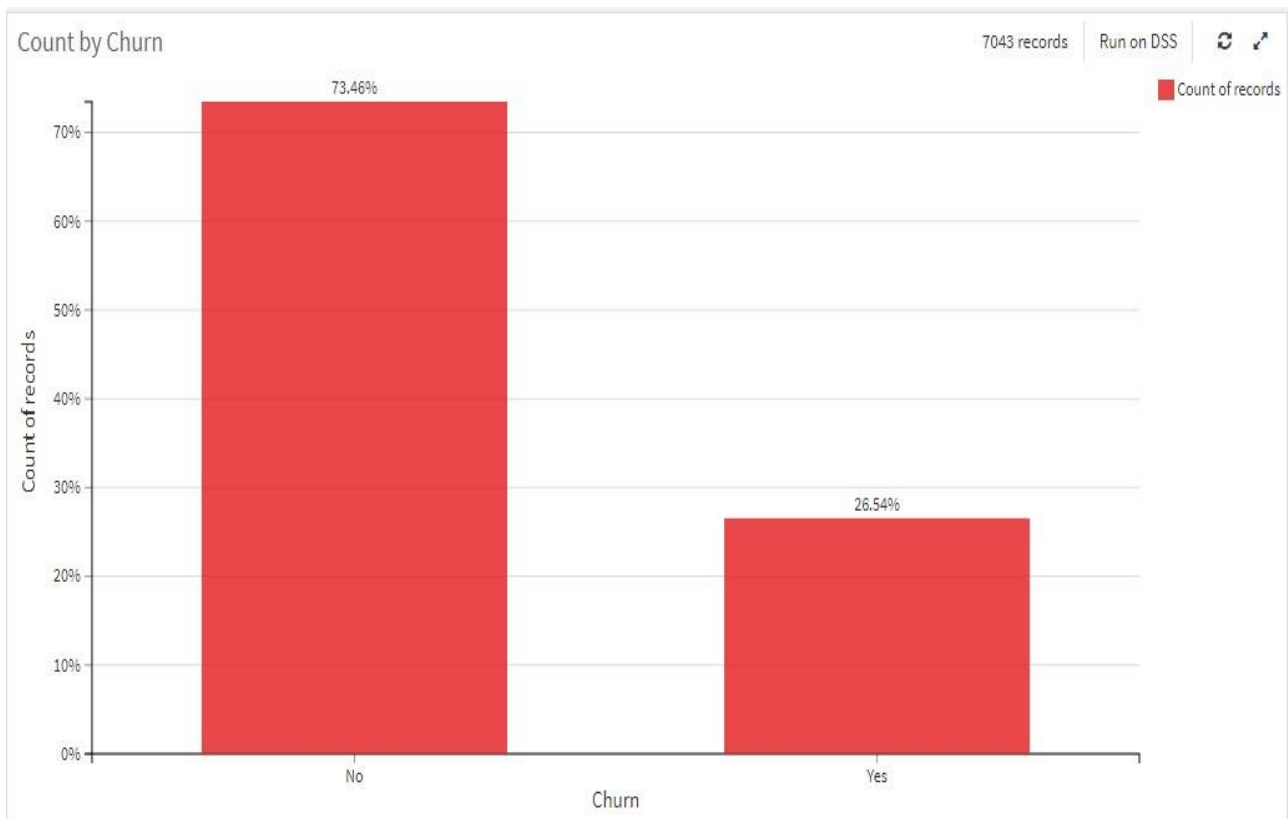
Predictive Analysis and Data Mining

## REPORT:

Teleco Customer Churn Analysis using Dataiku.

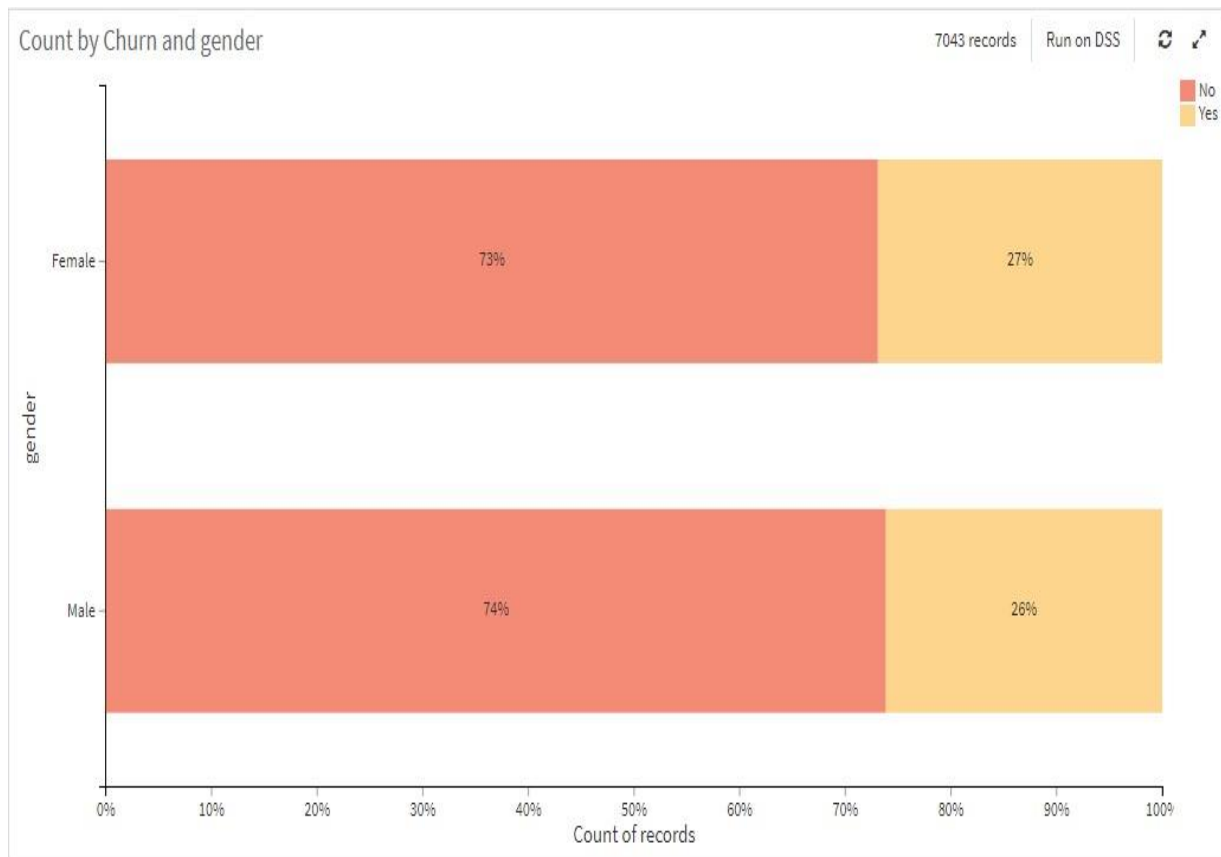
## ANALYSED BY:

AMALAI RHAM MACHUNGA



**ANALYSIS:** The vertical bar above shows that the customers who churned are 26.54% while the customers who didn't churn are 73.46% of the entire number of customers the Telco has. The general interpretation from the graph above is that there are less number of customers who churned.

**RECOMMENDATION:** The Telco should look into the reasons why there is a 26.54% churn of its customers. 26.54% churn for company is very catastrophic especially if they are big customers or long term loyal customers and losing them to competitors is not an option for them. As we proceed with further analysis, other salient points will surface to justify the churn.



**ANALYSIS:** The horizontal stacked bars 100% above shows that the client's gender does not have an impact on churn. There is no difference in the male and female bins. The difference is not justifiable enough for us to conclude that gender has an impact on churn.

**RECOMMENDATION:** Here, the Telco should work towards reducing the 27% for female churned customers and 26% for male churned customers by looking at other root causes as it relates to other graphs that will be analysed in this report.



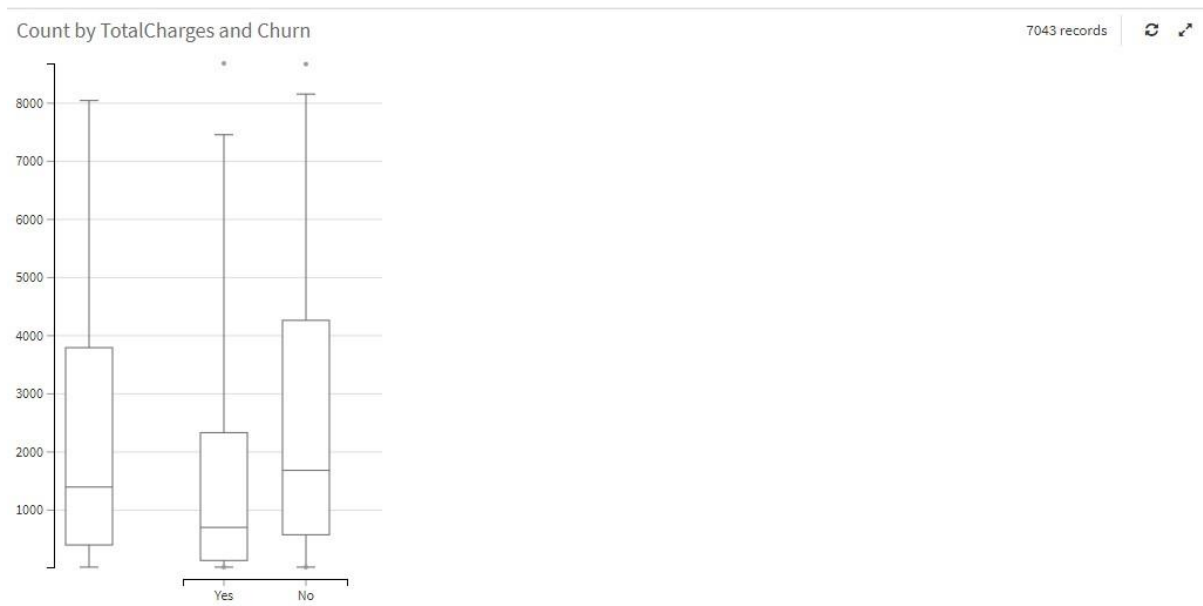
**ANALYSIS:** The horizontal stacked bar shows that users of the fiber optic service churned more possibly because of poor network coverage or possibly an increase in the tariff plan.

**RECOMMENDATION:** The Telco needs to review their service provision as it relates to the fiber optic, so as to reduce the number of churned customers.



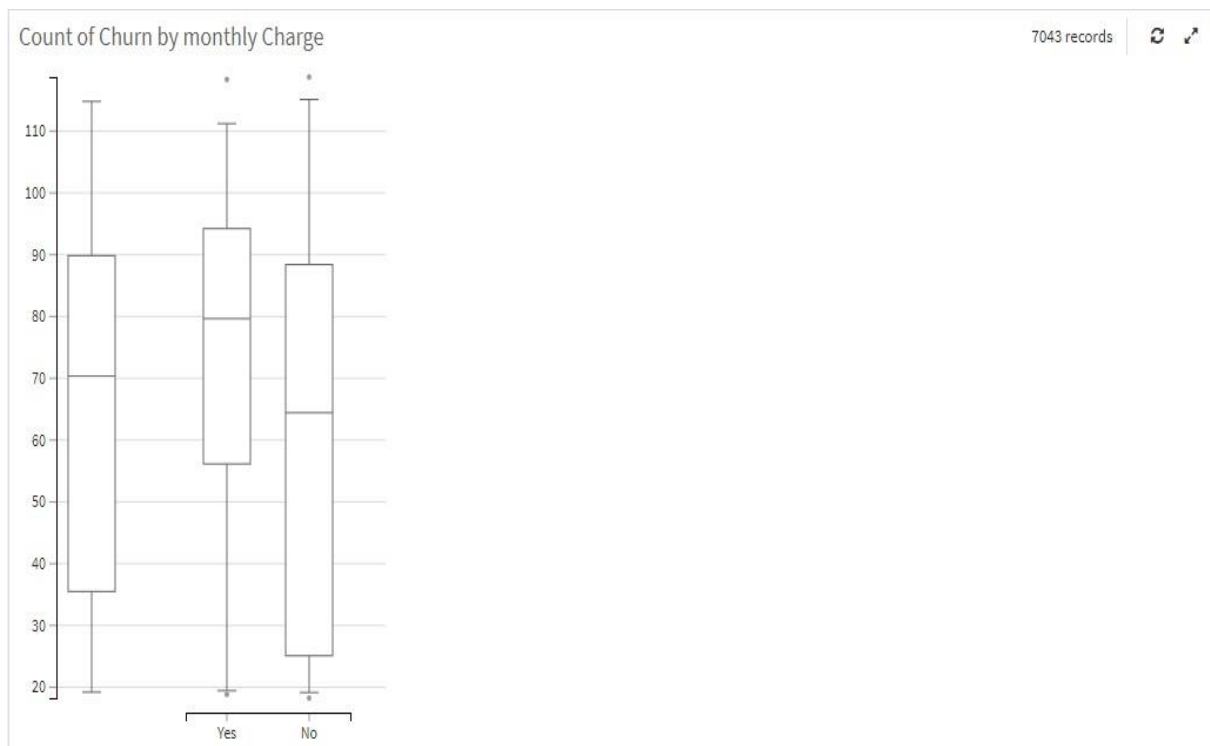
**ANALYSIS:** From the horizontal stacked bar, it can be observed that the customers who did not receive technical support from the Telco churned, for customers, having a great technical support is a sign that the company cares about the user experience of their products and not just about making sales.

**RECCOMENDATION:** The Telco can employ more technical support staff to cater for the growing number of customers. They can open up more technical support channels via which the customers can use. The technical support staff need to be retrained on the best customer service delivery mechanism to put in place so as to reduce this huge percentage of churn.



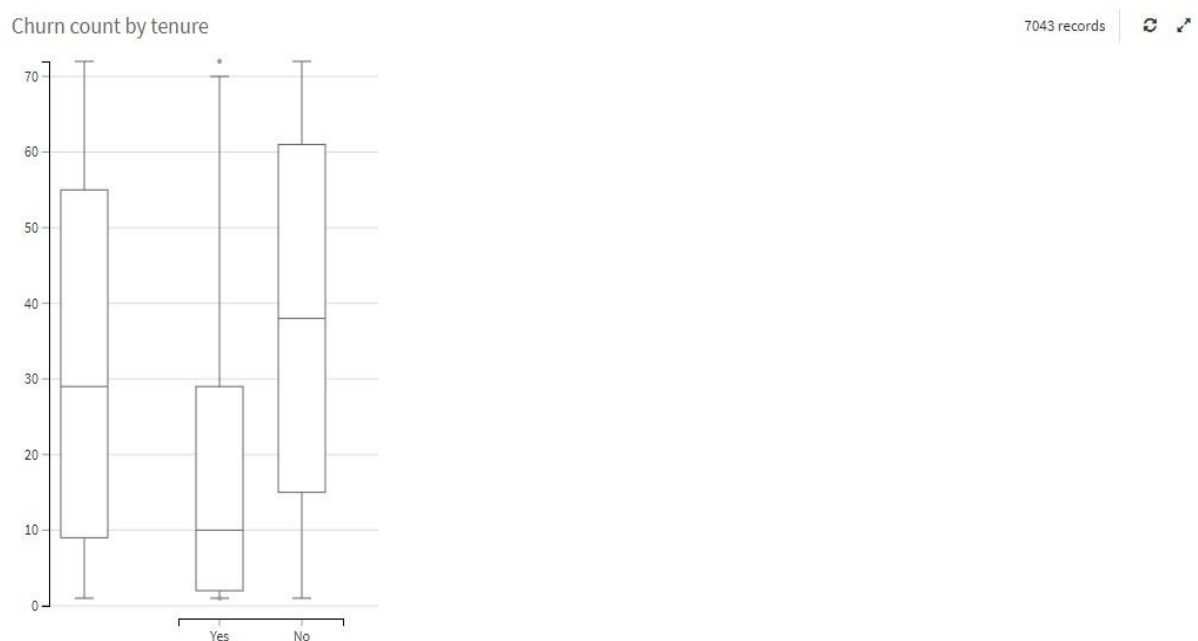
**ANALYSIS:** From the Box plot above, based on the total charges paid by the Telco's customers, less customers churned looking at the median value of 704 for the 'Yes' bin and 1,684 for the 'No' bin. It shows that the customers the churned are those who generally paid lesser total charges, they may also be short term customers.

**RESOMMENDATION:** The Telco should check why those who had a lesser total charge churned more. They may have to send out questionnaires to ask for feedback from these customers.



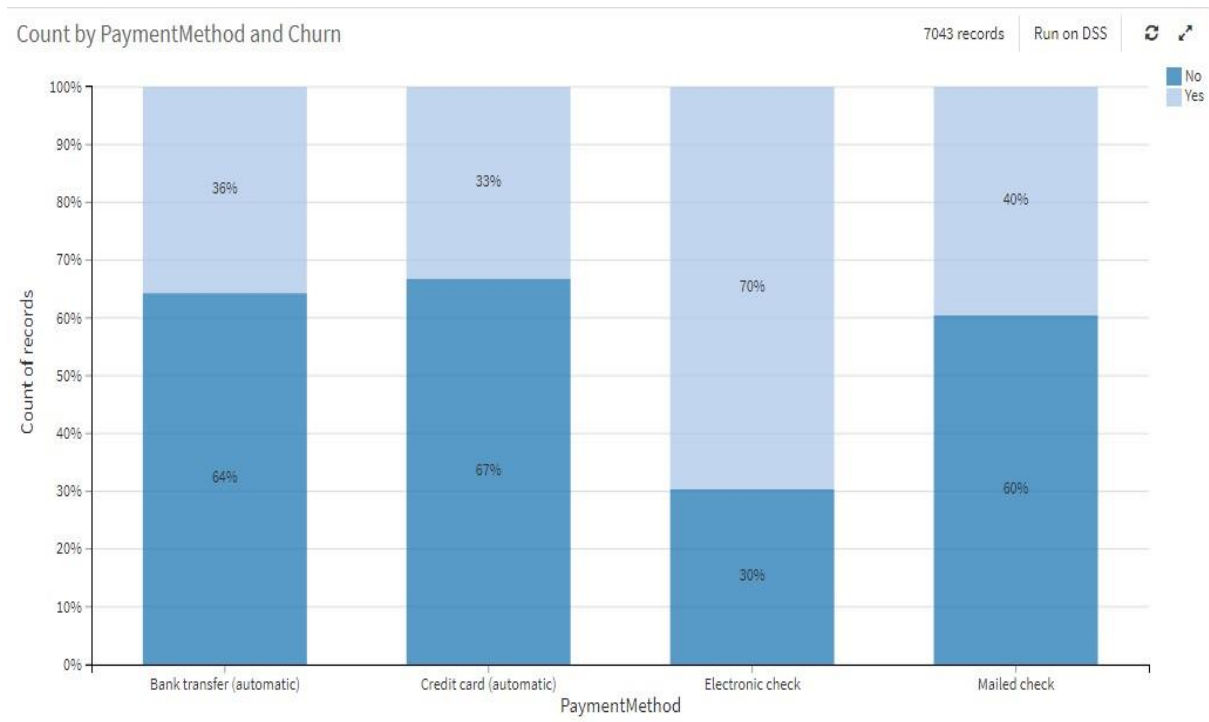
**ANALYSIS:** From the box plot displayed above, the median and mean values of those who churned ('Yes') is 79.65 and 74.44 respectively. The median and mean of those who did not churn ('No') is 64.43 and 61.27 respectively. We can observe that the customers who churned are the ones who paid monthly charges. This is interesting because, the customers may be experiencing a stressful payment processes while trying to settle their monthly charges which may result in them getting cut off, or they may not be getting value for the money they paid or there are hidden charges in the contract.

**RECOMMENDATION:** I recommend that the company reviews its monthly plan or review its payment processes.



**ANALYSIS:** From the box plot above, the mean and median values for those who churned ('Yes') is 17.98 and 10 respectively. The mean and median values for those who churned ('No') is 37.57 and 38 respectively. Comparing both bins, those who has a shorter contract with the Telco churned more than those who had a longer service contract.

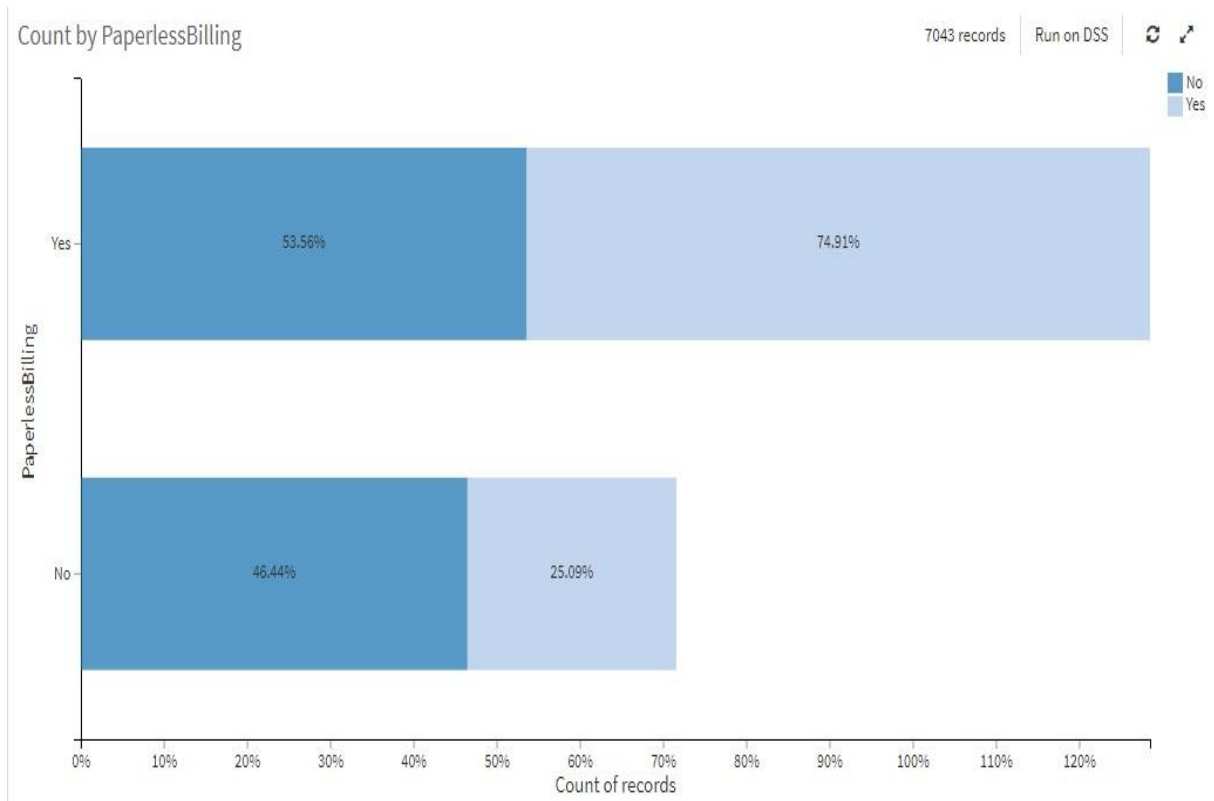
**RECOMMENDATION:** The Company should investigate to find out the reason for the churn of their short term customers.



**ANALYSIS:** From the vertical stacked bars 100% above, 70% out of those customers who used the Electronic check churned which signifies a bad payment method.

**RECOMMENDATION:** I will recommend that the Telco eliminates payment by Electronic Check and focus more on payments like Credit cards (automatic), Bank transfers (automatic) and Mailed checks.





**ANALYSIS:** From the stacked horizontal bar above, the graph shows that more of the telco customers used the paperless Billing. Out of the majority who used the paperless billing method churned.

**RECOMMENDATION:** I will recommend that the Telco should re-modify its paperless billing system or totally eliminate it and explore other billing options.