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TELECOM CUSTOMER CHURN ANALYSIS

NMIMS, Mumbai

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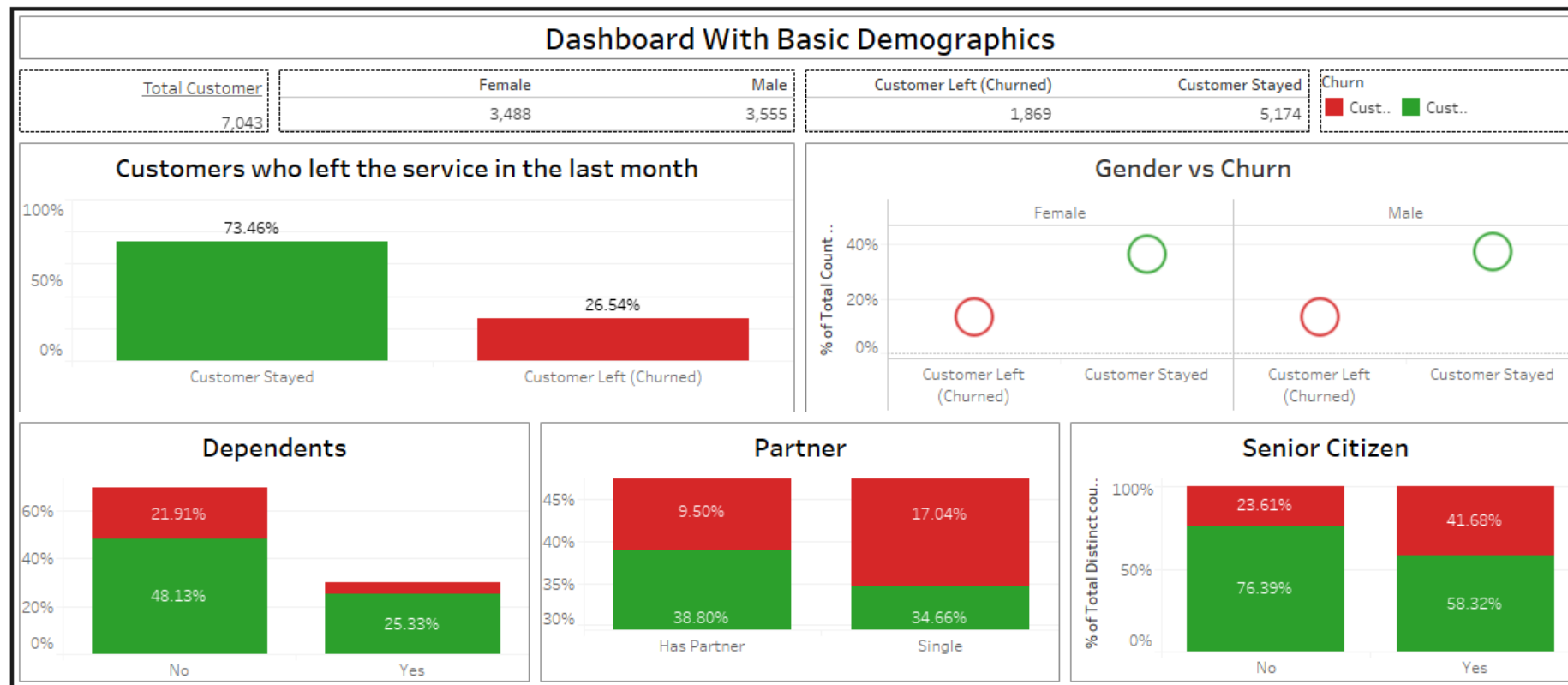
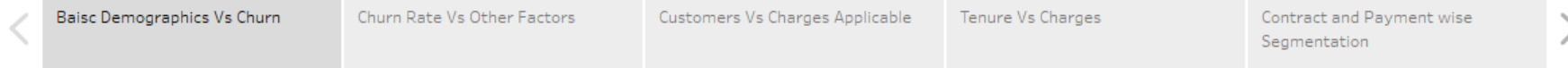
Jay Mehta



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BASIC DEMOGRAPHICS

TELECOM CUSTOMER CHURN ANALYSIS



Our Observation / Findings

- Many customers left the service last month. We should investigate further to know the actual reason of leaving
- The senior citizens are very less in number but from the visualisation it is clear that they have very high churn rates. It is clear from the dashboard that the customers who have families are more likely to stay back with the company. **Those who have no partners have higher churn rates and we should focus on them**
- From the visualisation it is evident that gender does not cause a significant difference in the churn rates
- We could see that the customers who are not dependent have a higher churn rate and we should focus on them**

BASIC DEMOGRAPHICS

CHURN RATE VS OTHER FACTOR

CUSTOMER VS CHARGES APPLICABLE

SEGMENTATION

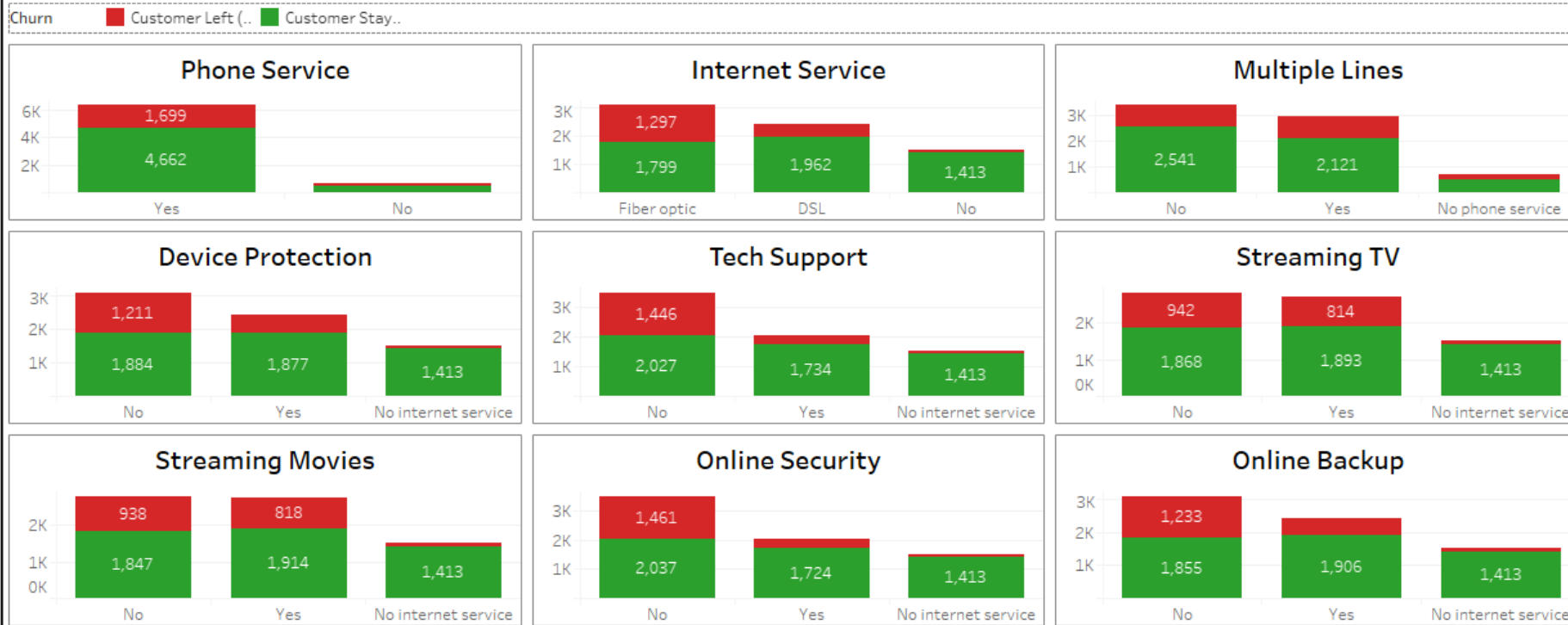
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CHURN RATE VS OTHER FACTOR

TELECOM CUSTOMER CHURN ANALYSIS

[Baisc Demographics Vs Churn](#)
[Churn Rate Vs Other Factors](#)
[Customers Vs Charges Applicable](#)
[Tenure Vs Charges](#)
[Contract and Payment wise Segmentation](#)

Churn Rate Vs Other Factors



Our Observation / Findings

- Customers who were using the internet service with fibre optic has maximum churn percentage and we should focus on this
- The customers who are not using device protection feature have a high churn rate
- The customers who are not using tech support feature have a high churn rate
- The customers who use multiple lines, Streaming TV and Streaming movies feature does not cause a significant difference in the churn rates
- The customers who are not using online security feature have a high churn rate
- The customers who are not using online backup feature have a high churn rate and we should focus on them

BASIC DEMOGRAPHICS

CHURN RATE VS OTHER FACTOR

CUSTOMER VS CHARGES APPLICABLE

SEGMENTATION



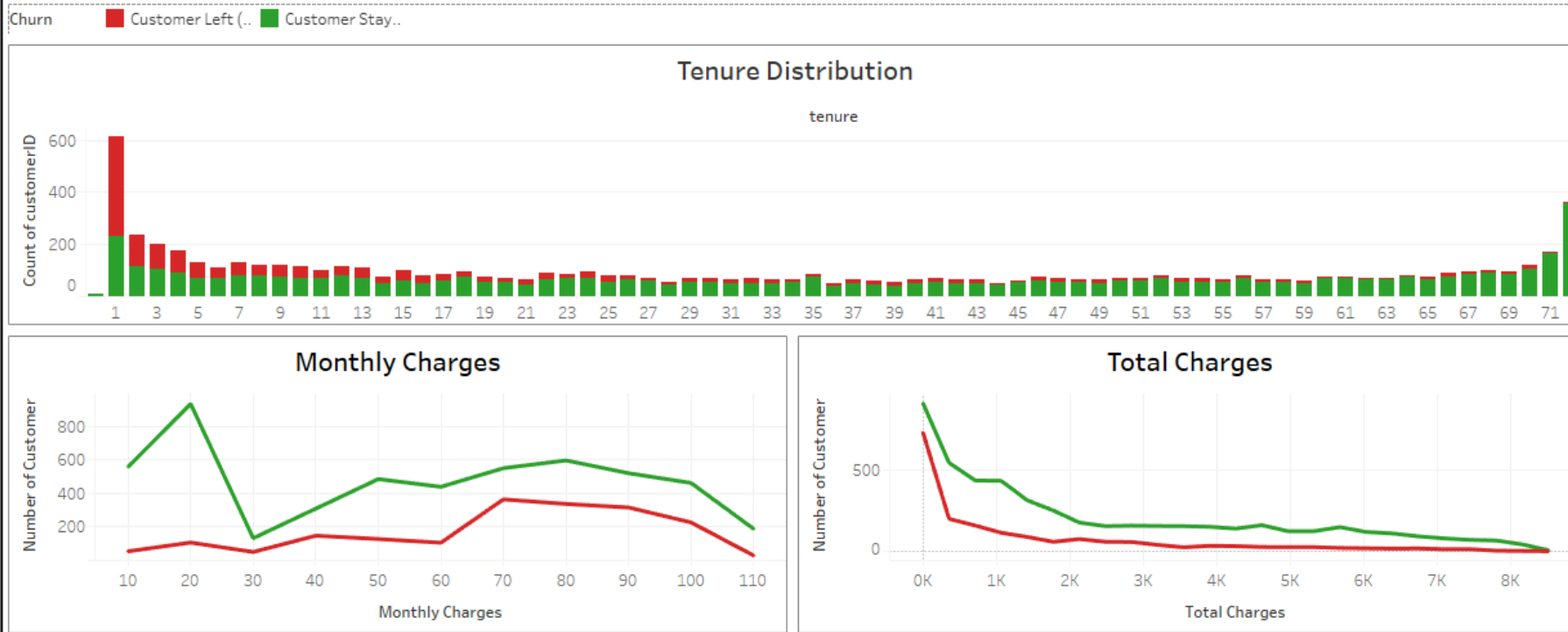
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CUSTOMER VS CHARGES APPLICABLE

TELECOM CUSTOMER CHURN ANALYSIS

Basic Demographics Vs Churn | Churn Rate Vs Other Factors | **Customers Vs Charges Applicable** | Tenure Vs Charges | Contract and Payment wise Segmentation

Customers Vs Charges Applicable



Our Observation / Findings

- From the tenure distribution visualisation, we can observe that most of the customers left after 1 month. The number of customers who left significantly decreases as the tenure increases.
- The monthly charges visualisation shows us that the number of customers who stayed back is more than the customers who left. A large number of customers pay less than \$24 per month which could be due to some discounts. **Between \$35 and \$60 the churn rate is higher and we should focus on this. We also find that a large number of customers who pay \$75 per month have higher churn rates**
- Most of the customers do not pay any charge. Most of the customers pay less total charges and the number of customers who stayed back is more than the customers who left

BASIC DEMOGRAPHICS

CHURN RATE VS OTHER FACTOR

CUSTOMER VS CHARGES APPLICABLE

SEGMENTATION



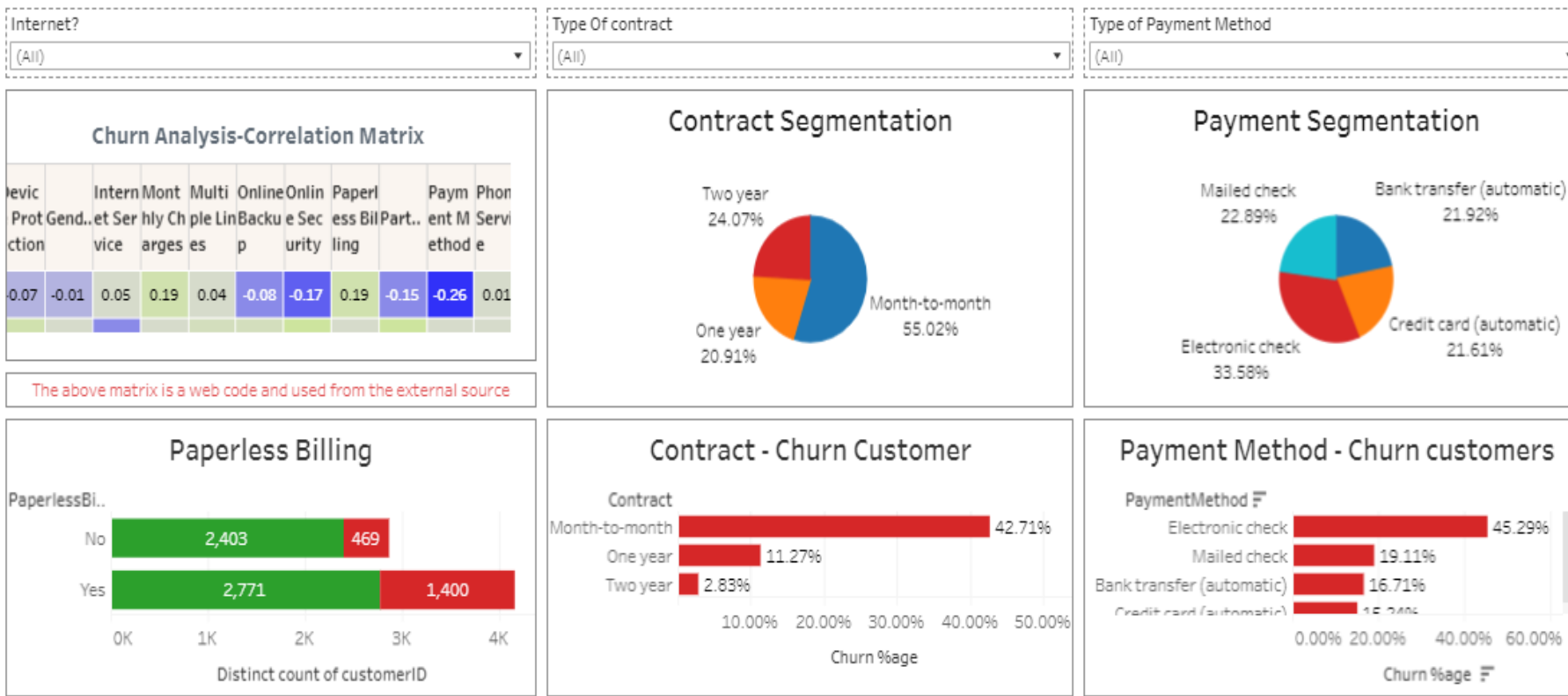
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CONTRACT AND PAYMENT WISE SEGMENTATION

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Contract and Payment Wise Segmentation



Our Observation / Findings

- The month to month contracts is responsible for more than half of the customers compared to one year or two year contracts. We should focus on more schemes or discounts in this category
- The churn percentage also show that the customers with month to month contracts have higher churn rates and we should investigate the reason for the same
- The visualisation shows us that the most preferred payment mode is via an Electronic check compared to other automatic modes
- We can see that the churn percentage for Electronic check payment mode is higher than the others. So we should focus on these customers

BASIC DEMOGRAPHICS

CHURN RATE VS OTHER FACTOR

CUSTOMER VS CHARGES APPLICABLE

SEGMENTATION



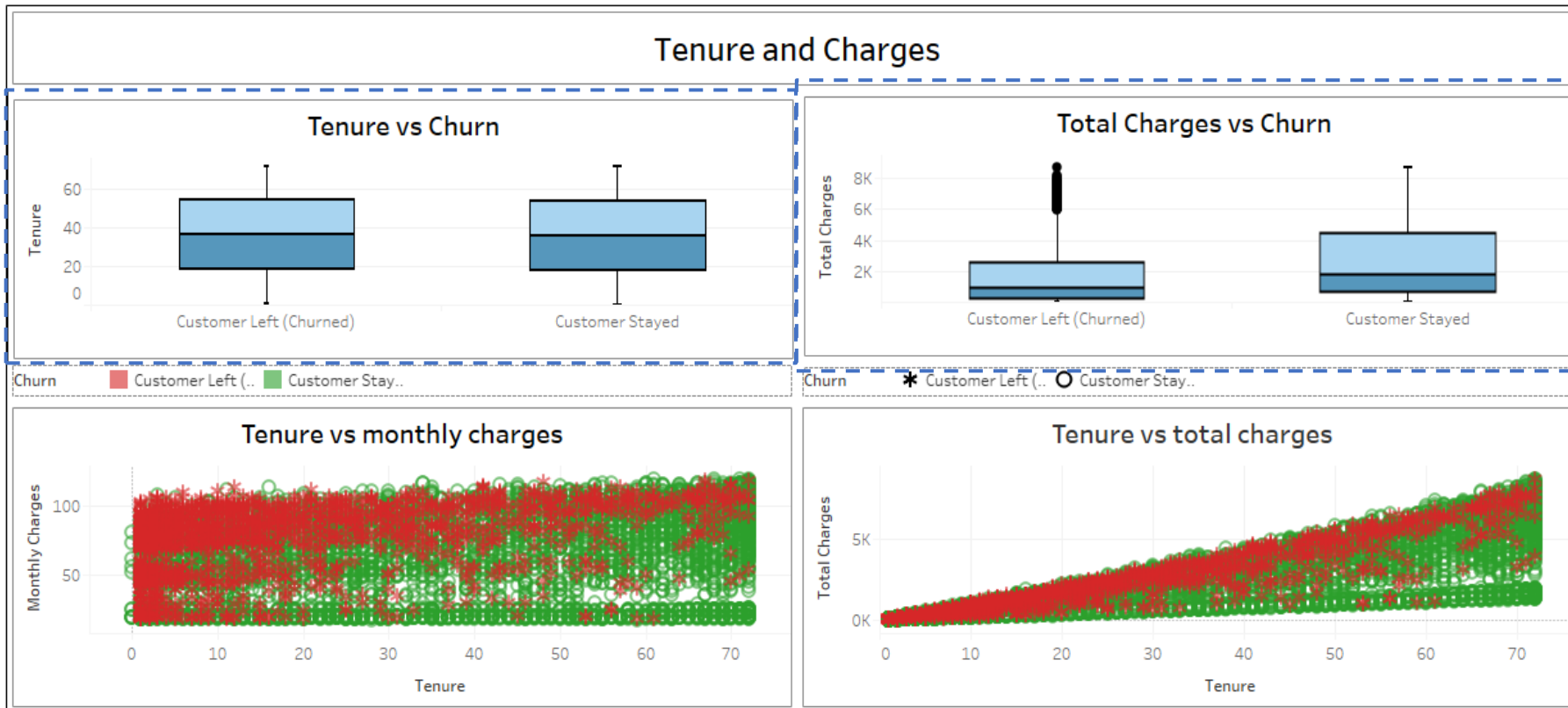
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TENURE AND CHARGES RELATION

TELECOM CUSTOMER CHURN ANALYSIS

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[Contract and Payment wise Segmentation](#)

Tenure and Charges



Observations

- Box plots visually show the distribution of numerical data and skewness through displaying the data quartiles (or percentiles) and averages.
- It shows the tenure Vs churn has normal distribution but total charges Vs churn has some outliers.
- The tenure vs charges scatter plot is to understand each customer value returns.

Suggestions

- Features such as MonthlyCharges, PaperlessBilling, InternetService appear to play a role in customer churn and we should focus on them.
- Customers in a month-to-month contract, with PaperlessBilling and are within 12 months tenure, are more likely to churn and we should focus on them.

BASIC DEMOGRAPHICS

CHURN RATE VS OTHER FACTOR

CUSTOMER VS CHARGES APPLICABLE

SEGMENTATION



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