



## Tesco Internet Customer Churn Analysis Project.

**Data Analyst:** Evalyn Njagi

### **Executive Summary:**

This report provides insights into the customer churn analysis for Tesco, highlighting trends in retention rates, customer tenure, churn reasons, and the impact of offers and services. These insights are critical to understanding customer behaviour and developing strategies to minimize churn while improving overall retention.

### **Purpose:**

To determine the following:

- Total Customers who churned.
- Factors that are affecting the churning rate of customers.

### **DATA DESCRIPTION:**

This dataset includes 4 datasets which consist of:

Telco\_customer\_churn\_demographics.xlsx  
Telco\_customer\_churn\_services.xlsx  
Telco\_customer\_churn\_status.xlsx

### **Content:**

- CustomerID: A unique ID that identifies each customer.
- Count: A value used in reporting/dashboarding to sum up the number of customers in a filtered set.
- Gender: The customer's gender: Male, Female
- Age: The customer's current age, in years, at the time the fiscal quarter ended.
- Senior Citizen: Indicates if the customer is 65 or older: Yes, No
- Married: Indicates if the customer is married: Yes, No
- Dependents: Indicates if the customer lives with any dependents: Yes, No. Dependents could be children, parents, grandparents, etc.



- Number of Dependents: Indicates the number of dependents that live with the customer.
- Services  
CustomerID: A unique ID that identifies each customer.
- Count: A value used in reporting/dashboarding to sum up the number of customers in a filtered set.
- Quarter: The fiscal quarter that the data has been derived from (e.g. Q3).
- Referred a Friend: Indicates if the customer has ever referred a friend or family member to this company: Yes, No
- Number of Referrals: Indicates the number of referrals to date that the customer has made.
- Tenure in Months: Indicates the total amount of months that the customer has been with the company by the end of the quarter specified above.
- Offer: Identifies the last marketing offer that the customer accepted, if applicable. Values include None, Offer A, Offer B, Offer C, Offer D, and Offer E.
- Phone Service: Indicates if the customer subscribes to home phone service with the company: Yes, No
- Avg Monthly Long-Distance Charges: Indicates the customer's average long-distance charges, calculated to the end of the quarter specified above.
- Multiple Lines: Indicates if the customer subscribes to multiple telephone lines with the company: Yes, No
- Internet Service: Indicates if the customer subscribes to Internet service with the company: No, DSL, Fiber Optic, Cable.
- Avg Monthly GB Download: Indicates the customer's average download volume in gigabytes, calculated to the end of the quarter specified above.
- Online Security: Indicates if the customer subscribes to an additional online security service provided by the company: Yes, No
- Online Backup: Indicates if the customer subscribes to an additional online backup service provided by the company: Yes, No
- Device Protection Plan: Indicates if the customer subscribes to an additional device protection plan for their Internet equipment provided by the company: Yes, No
- Premium Tech Support: Indicates if the customer subscribes to an additional technical support plan from the company with reduced wait times: Yes, No
- Streaming TV: Indicates if the customer uses their Internet service to stream television programming from a third party provider: Yes, No. The company does not charge an additional fee for this service.
- Streaming Movies: Indicates if the customer uses their Internet service to stream movies from a third party provider: Yes, No. The company does not charge an additional fee for this service.



- Streaming Music: Indicates if the customer uses their Internet service to stream music from a third party provider: Yes, No. The company does not charge an additional fee for this service.
  - Unlimited Data: Indicates if the customer has paid an additional monthly fee to have unlimited data downloads/uploads: Yes, No
  - Contract: Indicates the customer's current contract type: Month-to-Month, One Year, Two Year.
  - Paperless Billing: Indicates if the customer has chosen paperless billing: Yes, No
  - Payment Method: Indicates how the customer pays their bill: Bank Withdrawal, Credit Card, Mailed Check
  - Monthly Charge: Indicates the customer's current total monthly charge for all their services from the company.
  - Total Charges: Indicates the customer's total charges, calculated to the end of the quarter specified above.
  - Total Refunds: Indicates the customer's total refunds, calculated to the end of the quarter specified above.
  - Total Extra Data Charges: Indicates the customer's total charges for extra data downloads above those specified in their plan, by the end of the quarter specified above.
  - Total Long-Distance Charges: Indicates the customer's total charges for long distance above those specified in their plan, by the end of the quarter specified above.
  - Status  
CustomerID: A unique ID that identifies each customer.
  - Count: A value used in reporting/dashboarding to sum up the number of customers in a filtered set.
  - Quarter: The fiscal quarter that the data has been derived from (e.g. Q3).
  - Satisfaction Score: A customer's overall satisfaction rating of the company from 1 (Very Unsatisfied) to 5 (Very Satisfied).
  - Satisfaction Score Label: Indicates the text version of the score (1-5) as a text string.
  - Customer Status: Indicates the status of the customer at the end of the quarter: Churned, Stayed, or Joined
  - Churn Label: Yes = the customer left the company this quarter. No = the customer remained with the company. Directly related to Churn Value.
  - Churn Value: 1 = the customer left the company this quarter. 0 = the customer remained with the company. Directly related to Churn Label.
  - Churn Score: A value from 0-100 that is calculated using the predictive tool IBM SPSS Modeler. The model incorporates multiple factors known to cause churn. The higher the score, the more likely the customer will churn.
  - Churn Score Category: A calculation that assigns a Churn Score to one of the following categories: 0-10, 11-20, 21-30, 31-40, 41-50, 51-60, 61-70, 71-80, 81-90, and 91-100
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- **CLTV: Customer Lifetime Value.** A predicted CLTV is calculated using corporate formulas and existing data. The higher the value, the more valuable the customer. High value customers should be monitored for churn.
  - **CLTV Category:** A calculation that assigns a CLTV value to one of the following categories: 2000-2500, 2501-3000, 3001-3500, 3501-4000, 4001-4500, 4501-5000, 5001-5500, 5501-6000, 6001-6500, and 6501-7000.
  - **Churn Category:** A high-level category for the customer's reason for churning: Attitude, Competitor, Dissatisfaction, Other, Price. When they leave the company, all customers are asked about their reasons for leaving. Directly related to Churn Reason.
  - **Churn Reason:** A customer's specific reason for leaving the company. Directly related to Churn Category.
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## Key Findings

### 1. Customer Demographics

- **Gender:** Male and female customers exhibit similar churn rates, indicating other factors have a stronger influence.
- **Age Groups:** Customers aged 30–50 show higher churn rates, with over 1,300 individuals per group. Targeted retention strategies for this demographic could be effective.
- **Marital Status & Dependents:** Families with dependents have slightly higher churn rates, potentially influenced by pricing concerns.

### 2. Churn by Service Type

- **Internet Services:**
  - Fiber Optic customers have the highest churn (3,035 users), followed by DSL (1,652 users).
  - Customers with no internet services churn less frequently (1,526 users), suggesting dissatisfaction with internet quality or pricing is a major factor.
- **Contract Type:** Month-to-month contracts exhibit the highest churn, highlighting the need for incentives to encourage long-term commitments.

### 3. Churn Drivers

- **Primary Reasons:**
    - Competition accounts for 841 churned customers.
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- Pricing and dissatisfaction collectively contribute to over 500 churn cases.
  - Attitude and other factors are less significant but still noteworthy.
- Satisfaction Scores: Lower satisfaction scores correlate strongly with higher churn rates, reinforcing the importance of customer support and experience.

#### **4. Revenue Impacts**

- Monthly Revenue: Churned customers represent \$8,533.01 in lost revenue, significantly higher than revenue from new customers (\$144.22).
- Lifetime Value (CLTV): Increasing retention by even 5% could boost CLTV by approximately 25%.

#### **5. Tenure and Churn**

- Customers with shorter tenures are more likely to churn, especially within the first 24 months. Churn rates decrease significantly after 36 months, suggesting loyalty incentives for newer customers could reduce churn rates.

#### **6. Retention Offers**

- Offers A and B effectively reduce churn, with churn rates under 7% among recipients. However, offers C and E have minimal impact and could be reconsidered or restructured.

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### **Actionable Insights**

#### **1. Retention Strategies**

- Focus on Month-to-Month Contracts: Incentivize upgrades to annual or two-year contracts through discounts or loyalty rewards.
- Improve Internet Service: Address customer complaints related to Fiber Optic and DSL services by enhancing quality and reliability.
- Segment-Specific Offers: Target high-risk groups such as middle-aged customers and families with dependents with tailored offers and support.

#### **2. Customer Support Enhancements**

- Invest in training customer service teams to improve satisfaction scores, particularly for internet and pricing-related complaints.
- Implement proactive outreach to dissatisfied customers to address issues before they churn.



### 3. Pricing and Value

- Reassess pricing strategies for competitive markets and develop tiered pricing options to accommodate varying customer budgets.
  - Bundle services (e.g., internet and phone) to provide better value and improve retention.
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### Conclusion

By focusing on improving internet service quality, addressing pricing concerns, and targeting retention offers to high-risk segments, Tesco can reduce churn rates and improve customer lifetime value. Data-driven strategies and consistent monitoring will ensure long-term customer satisfaction and profitability.