

Customer Churn Analysis Report

Dataset: Databel – Customer Telecom Data

Dashboards 1–4 Summary & Insights

Dashboard 1 — Customer Demographics & Churn

Objective

Understand how customer demographics influence churn.

Charts Included

1. **3 Cards – Customers (Before & After) Churn , Churn Rate**
2. **Azure Map – Churn by State**
3. **Bar Chart – Churn by Churn reason**
4. **Bar Chart – Churn by Age, (trend line and average is available too)**
5. **Slicer – To filter States**

Key Insights

- Churn rate reached to a 27% percent
 - **Some states show higher churn**, indicating possible regional service issues.
 - Customers aged (40 to 50) has higher rate of churn
 - Top churn reason is that the competitor made better offer
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Dashboard 2 — Customer Usage & Churn

Objective

Analyze whether customer usage behavior influences churn.

Charts Included

1. Violin Plot – Local Mins vs Churn
2. Column Chart – International Plan vs Churn
3. Scatter Chart – Intl Minutes vs Extra Intl Charges vs Churn
4. Column Chart – Customer service calls vs churn
5. Slicer – to filter the customer service calls

Key Insights

- **Local Minutes:**
The distribution of local usage is similar for churned and retained customers — **usage does not significantly drive churn.**
- **International Plan:**
Customers without an international plan show **more churn**
- **International Minutes & Extra Charges:**
High international usage or extra charges **correlate** with churn in this dataset.
- **Customer Service Calls:**
when the Customer service calls increase, the churn rate decreases **slightly**

Dashboard 3 — Service Subscriptions & Churn

Objective

Determine whether optional services influence customer retention.

Charts Included

1. **Bar Chart – Churn by Contract Type**
2. **Donut Chart – Churn by Payment Method**
3. **Column Chart – Churn by Device protection & online backup**
4. **Bar Chart – Churn vs Unlimited Data Plan**

Key Insights

- **Contract Type:**
Month-to-Month customers show **the highest churn**, while 1-Year and 2-Year contracts churn significantly less.
This is the **strongest predictor of churn** in the dataset.
 - **Payment Method:**
Certain methods (Direct debit) show **higher churn**, while other payments lead to higher retention.
 - **Device protection & Online backup:**
the **non-protected** devices has **higher rate of churn** than the protected ones
 - **Unlimited Data Plan:**
Unlimited Data Plan does **significantly reduce churn**, similar to Dashboard 2.
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Dashboard 4 — Billing, Charges & Revenue Impact on Churn

Objective

Identify whether pricing, charges, and billing behavior affect customer churn.

Charts Included

1. **Column Chart – Payment Method vs Churn**
2. **Bar Chart – Monthly Charge vs Churn**
3. **Scatter Chart – Total Charges vs Monthly Charges (Colored by Churn)**
4. **Slicer – to filter the payment method**

Key Insights

- **Payment Method:**
Automated payment methods show **higher churn**, while Manual or inconvenient methods reduce churn.
 - **Monthly Charge:**
Churned customers often pay slightly **lower monthly charges**, suggesting price sensitivity..
 - **Total Charges vs Monthly Charge Scatter:**
Customers with **high monthly bills but low total charges** are usually new customers — these customers churn early.
Long-term customers (high total charges) show **lower churn**..
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FINAL OVERALL CONCLUSION (All Dashboards Combined)

Across all 4 dashboards, the biggest churn drivers are:

❑ Contract Type (MOST IMPORTANT)

Month-to-Month customers churn **the most**.

❑ Payment Method

Customers using automatic payment methods churn more.

❑ Billing & Charges

Higher monthly charges and extra fees contribute to dissatisfaction and churn.

❑ Usage & Demographics (Least Important)

Usage behavior (minutes, data) and demographics (gender, dependents) have **weak or no impact**.

FINAL STATEMENT

The company can reduce churn by:

- Encouraging customers to move from **Month-to-Month** to **Annual contracts**
- Promoting **automatic payment methods**
- Reducing surprise fees (data overage, international charges)
- Offering loyalty benefits for long-term customers