Customer Churn Analysis

Data-Driven Retention Strategy

The Churn Challenge

Customer churn is silently eroding revenue streams and stunting business growth potential. Each lost customer represents not only immediate revenue loss but also diminished lifetime value and reduced opportunities for organic growth through referrals.

Understanding why customers leave is the first critical step towards building a sustainable retention strategy that protects revenue and strengthens customer relationships.

5–7x

Cost multiplier

Acquiring new customers vs retaining existing ones

Project Objective

01
Identify churn drivers
Analyze customer data to uncover the key factors and patterns that lead to customer attrition

02
Quantify impact
Measure the correlation between various customer behaviours and churn likelihood

03
Deliver recommendations
Provide actionable, data-backed strategies to reduce churn and improve customer lifetime value

Dataset Overview

440,000+ Customer Records

Comprehensive dataset providing deep insights into customer behaviour and characteristics

Demographics

Age, gender, location data enabling segmentation analysis

Usage Behaviour

Frequency patterns, feature adoption, engagement metrics

Support Interactions

Call volume, ticket history, resolution times

Payment History

Transaction records, delays, total spend, payment methods

Churn Status

Binary indicator tracking customer retention outcomes

# Data Cleaning & Preparation

Quality Assurance Steps

- **Null value treatment**

  Identified and removed incomplete records to ensure analysis integrity

- **Data type standardisation**

  Converted categorical and numerical fields to appropriate formats

- **Column normalisation**

  Standardised naming conventions and value ranges across all variables

Rigorous data preparation ensures reliable insights and accurate predictive modelling for churn analysis.
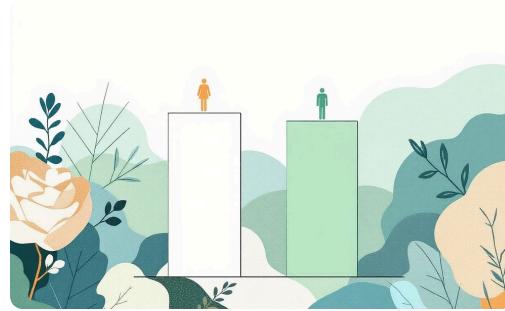
Made with GAMMA

Exploratory Data Analysis

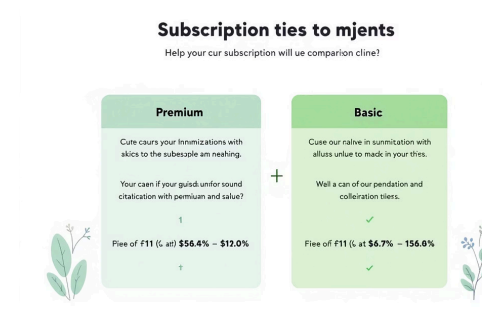## Understanding Churn Patterns Across Key Dimensions
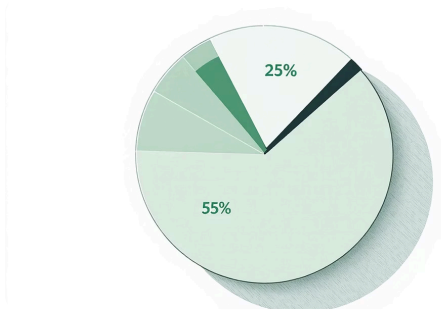
Churn Distribution

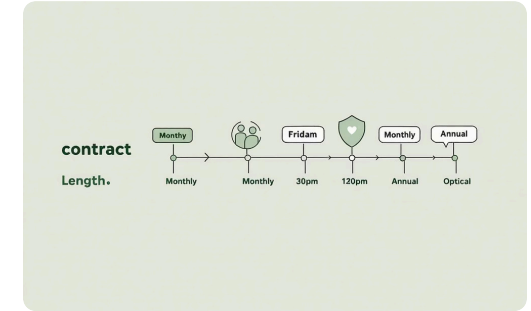Overall churn rate and customer retention baseline metrics

Gender Analysis

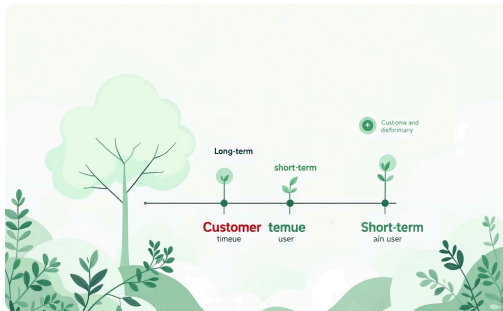Churn patterns across demographic segments

Subscription Type

Churn variation by service tier and pricing level
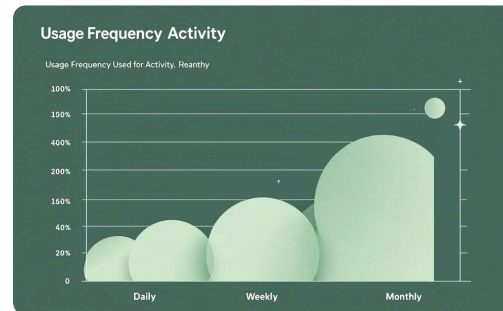

Contract Length

Impact of commitment period on retention rates

Tenure Analysis

Relationship between customer age and churn probability

Usage Frequency

Engagement levels as churn predictors

Behavioural Insights

Critical customer behaviours that signal churn risk and retention opportunities

Support Calls

Frequency and nature of customer service interactions reveal dissatisfaction patterns

Payment Delay

Late payments strongly correlate with financial friction and impending churn

Last Interaction

Recency of engagement indicates relationship strength and commitment level
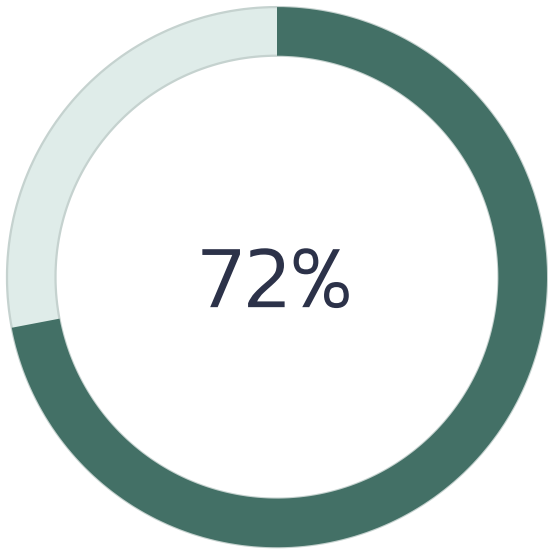
Total Spend

Investment levels reflect perceived value and switching cost considerations

Correlation Analysis

Quantifying the Churn Relationship

Statistical analysis reveals the strongest predictors of customer churn, enabling prioritised intervention strategies.

These correlations provide the foundation for building predictive models and targeting at-risk customer segments with tailored retention campaigns.
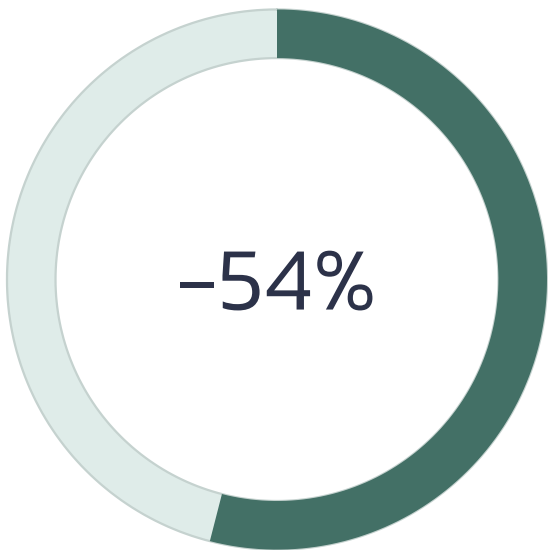
72%

Support calls

Positive correlation with churn

68%
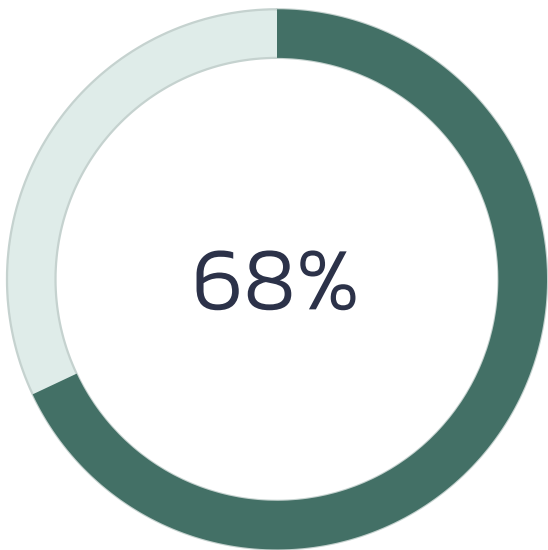
Payment delay

Strong churn indicator

–54%

Total spend

Negative correlation - higher spend, lower churn

What the Data Reveals

High-Risk Segments

Short-term contracts and low-engagement users demonstrate significantly elevated churn rates

Support Pattern

Customers requiring frequent support calls show 3x higher churn likelihood

Payment Behaviour

Payment delays serve as early warning signals - 68% correlation with eventual churn

Engagement Gap

Low usage frequency in first 90 days predicts 80% of early-stage churn

Value Perception

Higher spending customers demonstrate stronger retention and lower price sensitivity

Commitment Effect

Annual contracts reduce churn by 45% compared to month-to-month arrangements

Business Recommendations

1

Implement Proactive Support

Deploy predictive alerts to identify at-risk customers before they contact support. Reduce friction through self-service tools and proactive outreach programmes.

2

Optimise Payment Experience

Introduce flexible payment options, automated reminders, and grace periods to reduce payment-related churn triggers.

3

Enhance Onboarding

Create structured 90-day engagement programmes ensuring early adoption of key features and establishing usage habits.

4

Incentivise Long–Term Contracts

Offer compelling discounts and exclusive benefits for annual commitments to lock in retention and increase customer lifetime value.

5

Develop Tiered Value Propositions

Create clear upgrade paths and demonstrate ROI to increase spend levels and strengthen customer relationships.

Data-driven retention strategies can reduce churn by up to 35%, directly impacting profitability and enabling sustainable growth through improved customer lifetime value.