



CUSTOMER CHURN ANALYSIS DASHBOARD

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Tools: Power BI

Project Overview

- Analyzed customer data to identify churn patterns and retention opportunities
- Focused on key churn drivers and high-risk customer segments
- Developed a **3-page interactive Power BI dashboard**
- Page 1: Customer overview with key KPIs and insights
- Page 2: Detailed analysis of customer churn reasons
- Page 3: Action-oriented insights and retention recommendations
- Supports data-driven decision-making to reduce customer churn

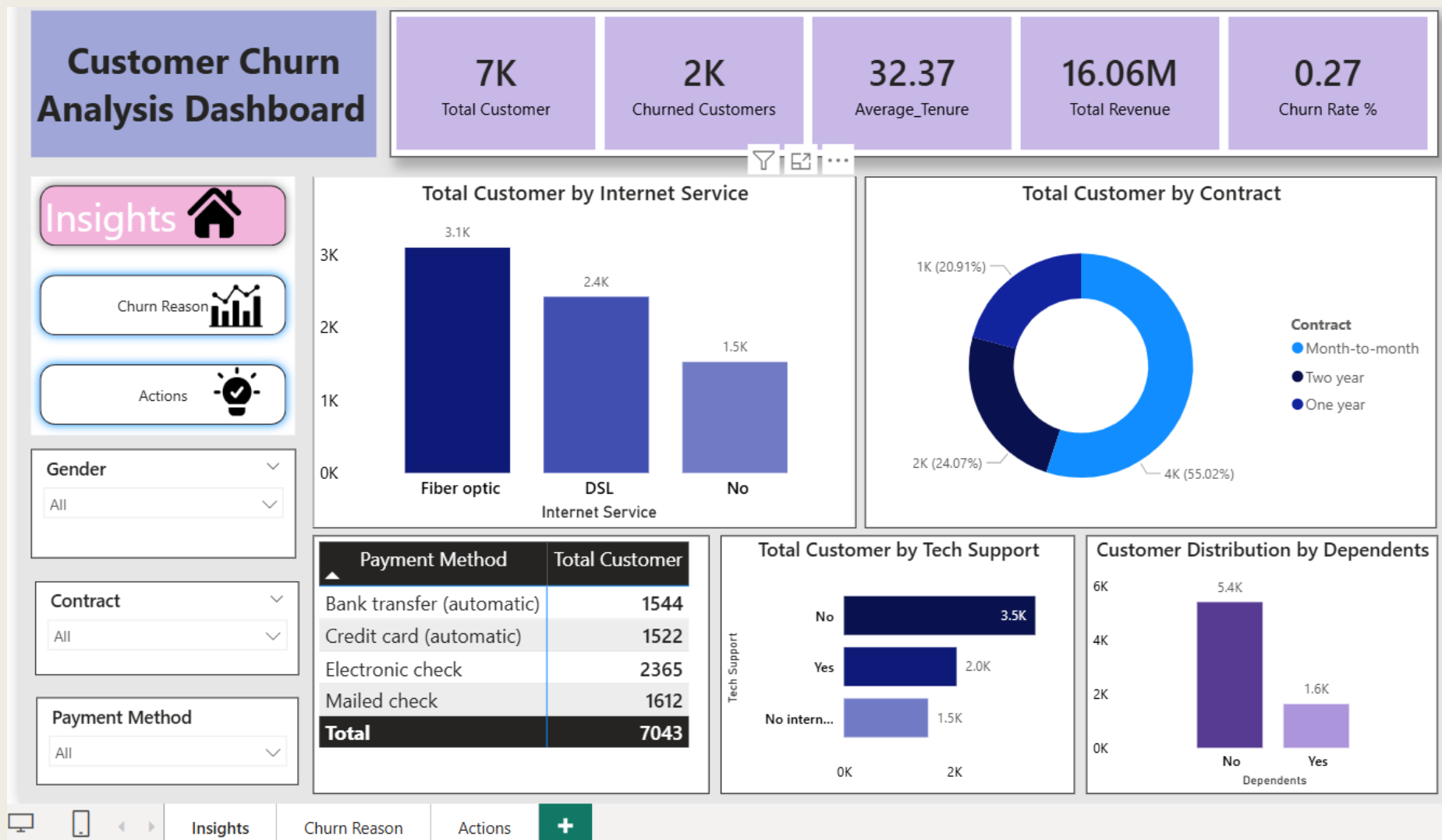
Dataset Overview

- **Customer Info:** CustomerID, Gender, Senior Citizen, Partner, Dependents
- **Services Subscribed:** Phone Service, Multiple Lines, Internet, Online Security, Online Backup, Device Protection, Tech Support, Streaming TV/Movies
- **Account & Charges:** Tenure Months, Monthly Charges, Total Charges
- **Contract & Payment:** Contract Type, Paperless Billing, Payment Method
- **Churn Metrics:** Churn Label (Yes/No), Churn Value, Churn Score, CLTV, Churn Reason

Quick Insights:

- Churn tracked via **Yes/No**
- Tenure & Charges → customer loyalty
- Services & Contract influence churn
- Payment method impacts retention

Dashboard – Page 1 (Insights)



Tools, Skills & Techniques Used

Business Intelligence & Analytics

- Power BI Dashboard Development

- KPI Design & Business Metrics

Data Preparation

- Power Query (Data Cleaning & Transformation)

- Data Modeling

Analytical Skills

- Customer Churn Analysis

- Customer Segmentation

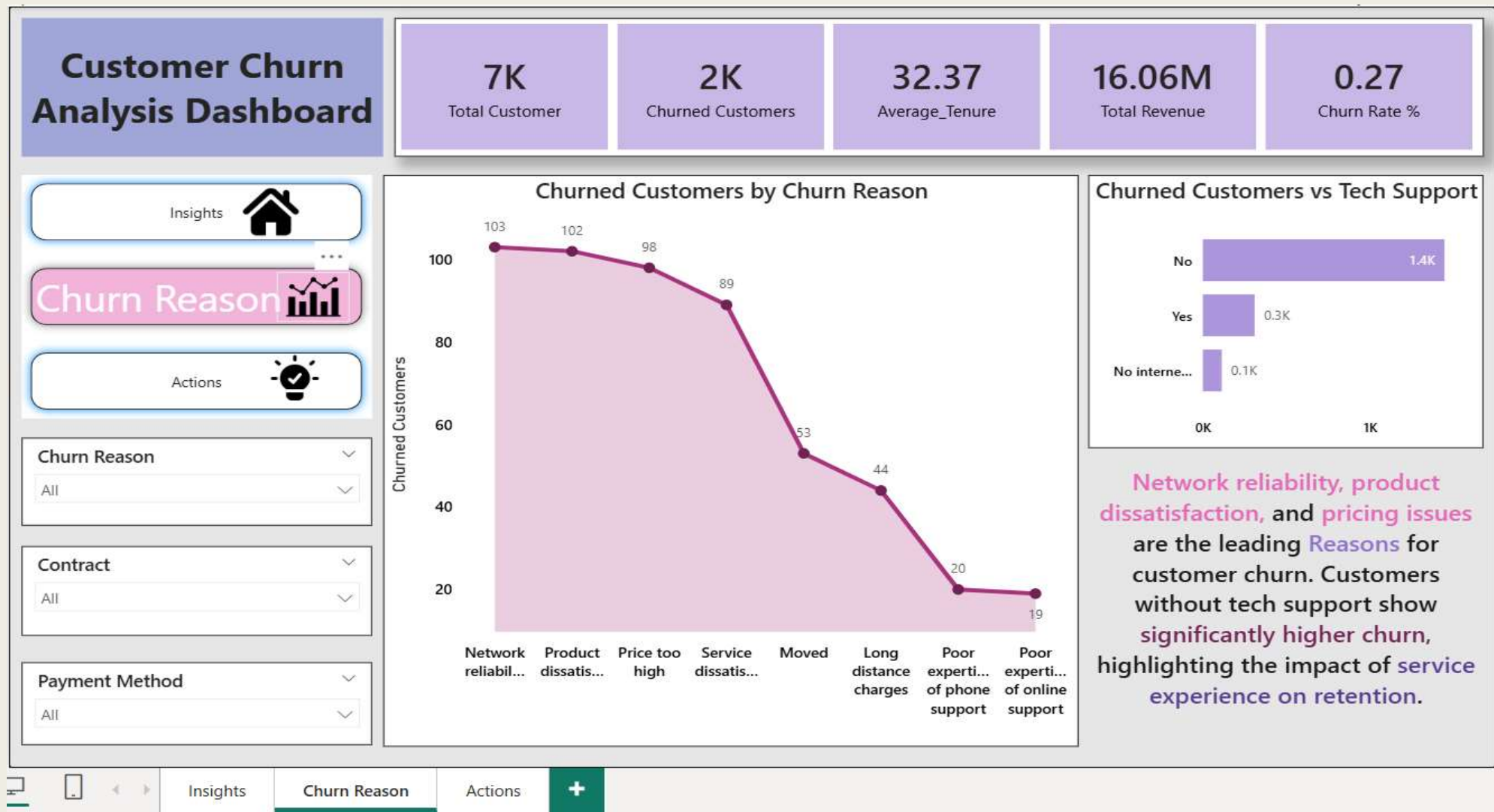
- Trend & Pattern Analysis

Technical Skills

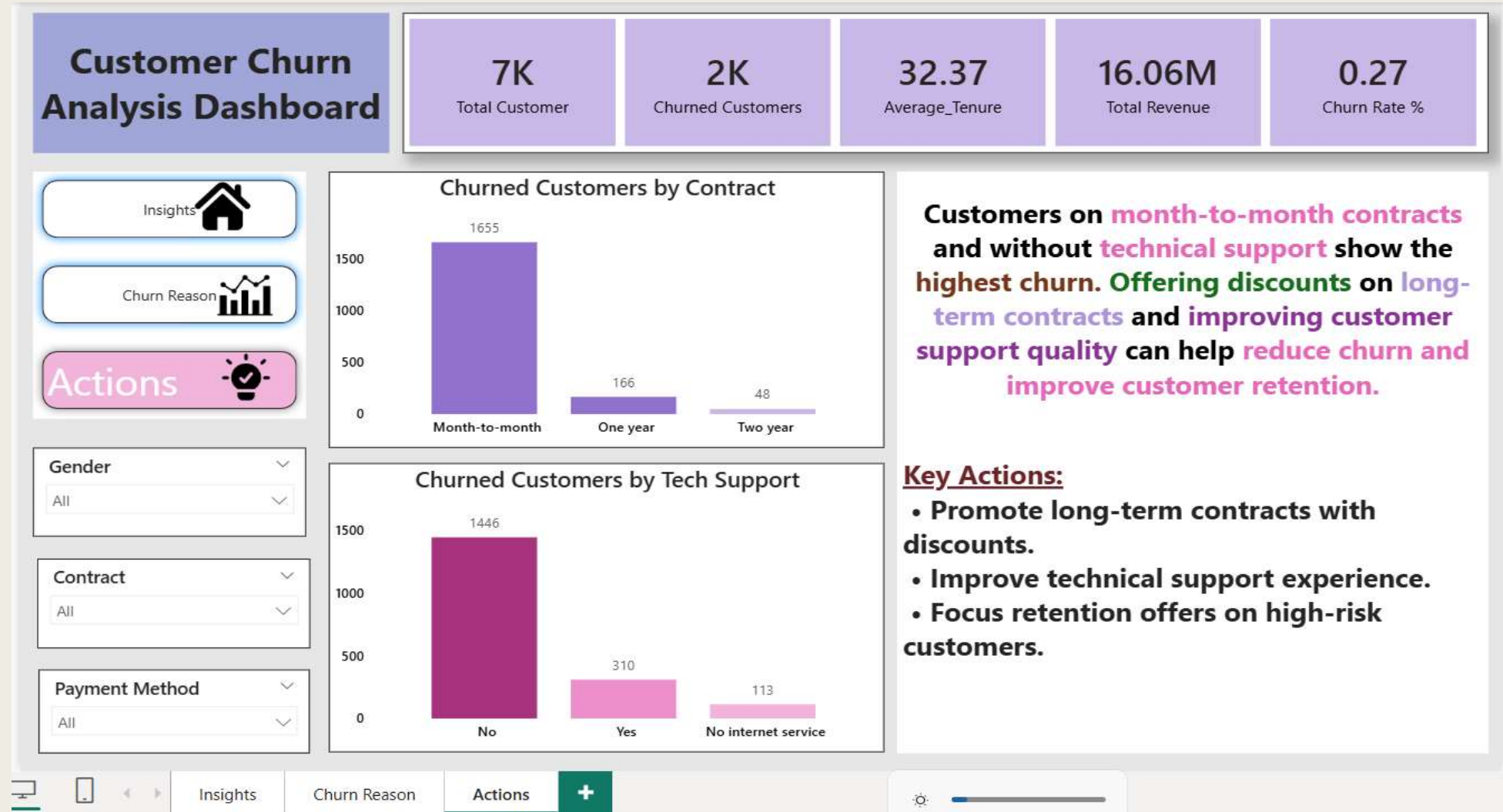
- DAX (Measures & Calculations)

- Data Visualization & Storytelling

Dashboard – Page 2 (Churn Reason)



Dashboard – Page 3 (Actions)



Dashboard Explanation

- **Page 1: Customer Overview**
Provides a high-level view of total customers, churn rate, revenue KPIs, and customer distribution by tenure, contract type, and services.
- **Page 2: Churn Reason Analysis**
Analyzes key reasons behind customer churn, highlighting service issues, contract types, and payment methods contributing to higher churn.
- **Page 3: Retention & Actionable Insights**
Identifies high-risk customers and presents data-driven insights to support targeted retention and customer engagement strategies.

Problem Statement

- Customer churn remains a critical challenge for subscription-based businesses, negatively impacting revenue and long-term growth.
- The business lacks a consolidated analytical view to monitor churn trends, identify key churn drivers, and detect high-risk customer segments.
- This dashboard is designed to analyze customer data, uncover churn patterns, and provide actionable insights that support data-driven retention strategies.

Business Impact

- Helps identify high-risk customers early
- Supports retention-focused decision making
- Reduces revenue loss due to churn
- Improves customer satisfaction & loyalty

Key Learnings

- Translating data into actionable insights
- Designing business-focused dashboards
- Understanding customer behavior patterns
- Using analytics for real-world business problems

Future Enhancements

- **Predictive Churn Modeling**
Apply machine learning models to estimate churn probability and identify high-risk customers in advance.
- **Real-Time Monitoring & Alerts**
Enable live data refresh and automated alerts to track churn trends and support proactive retention actions.
- **Advanced Customer Segmentation**
Enhance segmentation using usage behavior, tenure, and customer lifetime value (CLTV).
- **CRM & Business Integration**
Integrate insights with CRM systems to enable targeted marketing and personalized retention strategies.

THANK YOU