

Telco Customer Churn Analytics

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Introduction: Navigating the Competitive Telecom

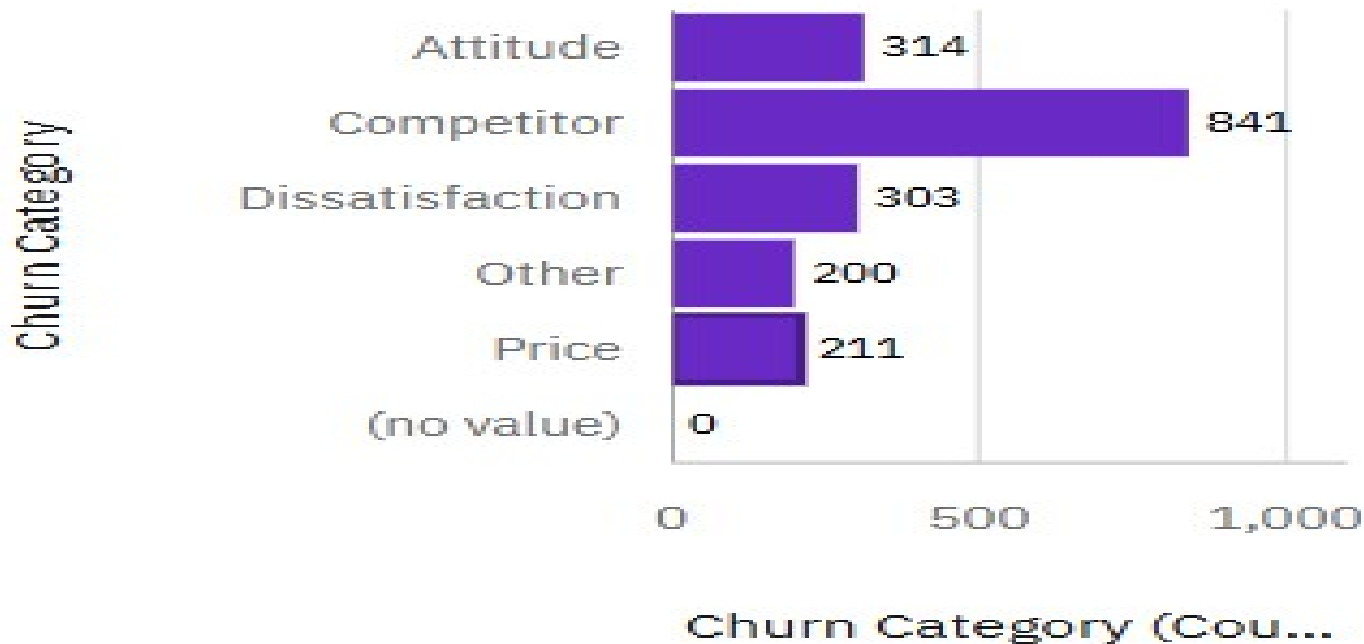
Churn Category



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Churn Category

Churn Category by Churn Category



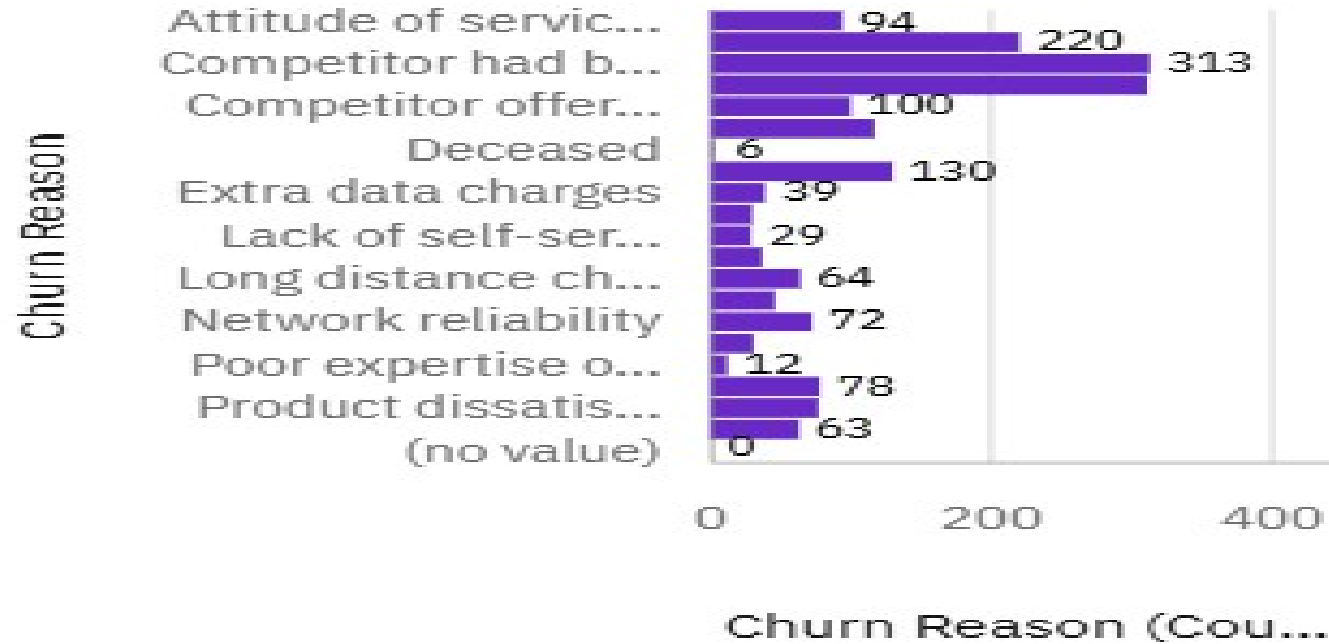
Churn Reason



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Churn Reason

Churn Reason by Churn Reason



Navigating the Competitive Telecom Landscape

The telecommunications industry is characterized by **fierce competition** and constant innovation. In this dynamic environment, customer loyalty is paramount.

Customer churn, defined as a customer discontinuing service with a company, poses a significant threat to revenue and growth. Understanding and mitigating churn is a strategic imperative for every telecom provider.

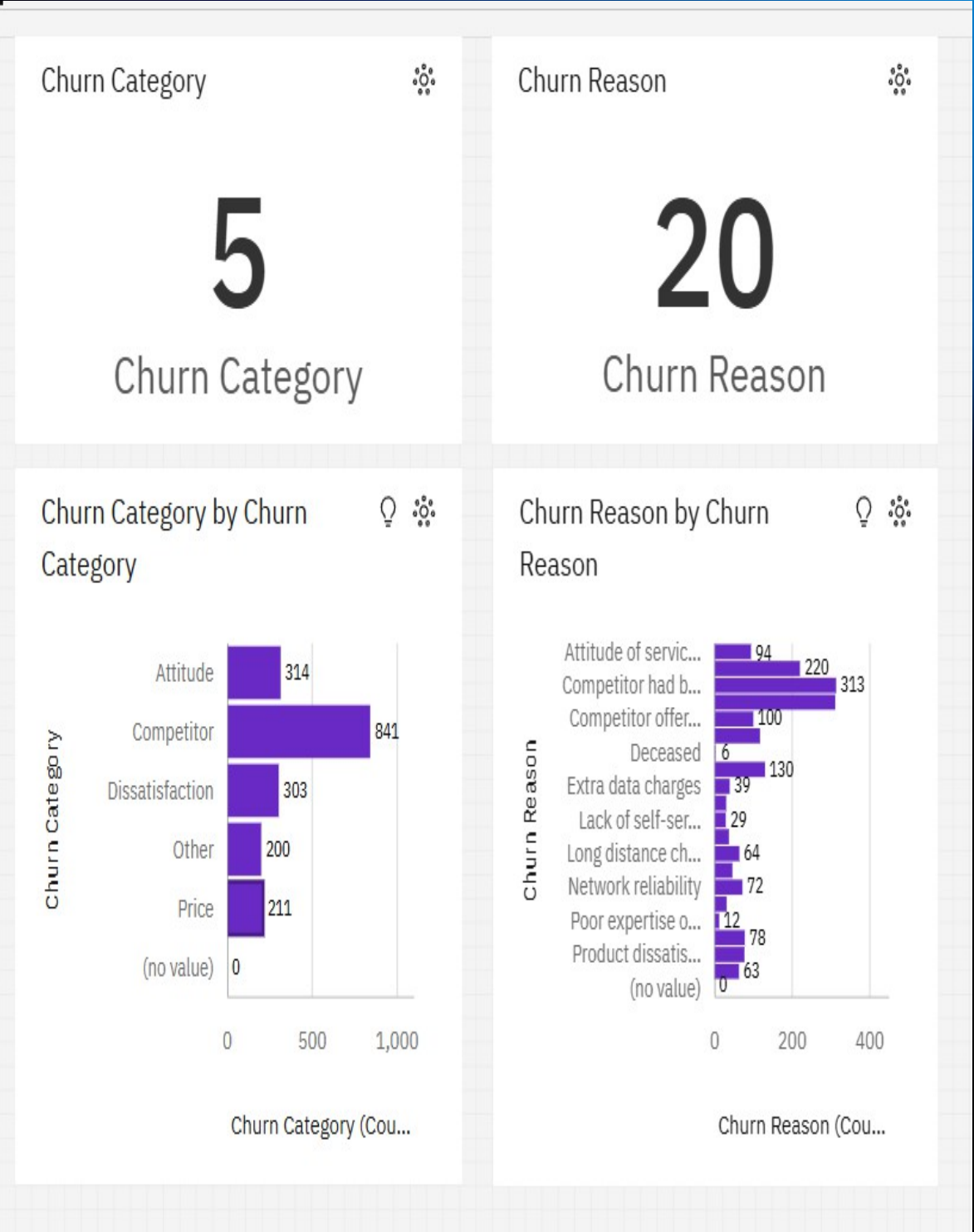
This project leverages **customer churn analytics** to deeply investigate:

- The underlying reasons why customers choose to leave.
- The identification of high-risk customer segments.
- Actionable strategies for effective customer retention.

Our analysis is based on a comprehensive dataset encompassing customer demographics, billing information, service usage patterns, and contract details.



Project Objectives: Driving Retention Through Data



Identify Key Churn Drivers

Uncover the primary factors influencing customer decisions to leave our services.



Segment High-Risk Customers

Group customers based on shared characteristics and churn susceptibility.



Build Interactive Dashboards

Develop intuitive visualizations for real-time data exploration and insights.



Support Strategic Decisions

Provide data-backed recommendations to enhance customer retention efforts.

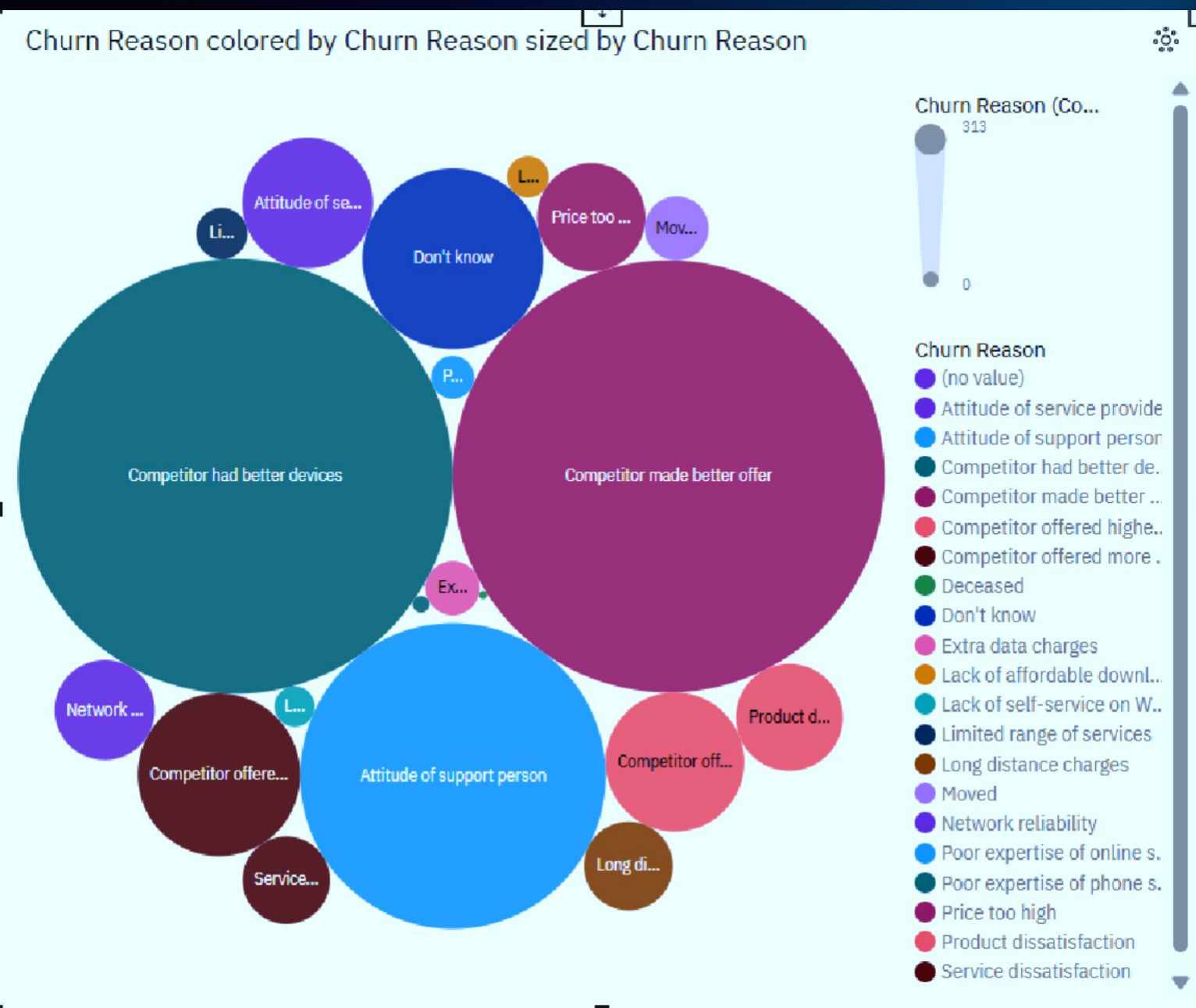
Tools & Analytical Approach

Data Sourcing & Platforms

- **Kaggle:** The primary source for our Telco Churn dataset, offering a rich collection of customer behavior data.
- **BM Cognos Analytics:** Utilized for robust dashboard creation, advanced data visualization, and extracting actionable insights.
- **Microsoft Word:** Employed for comprehensive documentation, report compilation, and presenting project findings.

Analytical Methodology

- **Data Cleaning:** Preprocessing raw data to ensure accuracy and consistency.
- **Descriptive Analytics:** Summarizing key characteristics of the dataset to understand patterns.
- **Visualization:** Creating graphical representations to explore relationships and trends.
- **Interpretation:** Translating analytical findings into meaningful business insights and recommendations.



Dataset at a Glance: Understanding Customer Profiles

The Telco Churn dataset provides a granular view of customer attributes, crucial for predictive modeling and understanding churn behavior. Each data point contributes to a holistic customer profile.



Demographics

Gender, Senior Citizen status, Partner/Dependents, and Tenure (customer longevity).



Services

Details on Phone Service, Internet Type (DSL, Fiber Optic, No Internet), and Tech Support subscriptions.



Account Details

Contract type (Month-to-month, One year, Two year), Payment method, and a unique Churn ID.



Billing Information

Monthly Charges and Total Charges, providing insight into customer spending habits.



Revenue & Churn

Key indicators including overall revenue contribution and the critical Churn Label (Yes/No).

Dashboard Overview: Snapshot of Churn

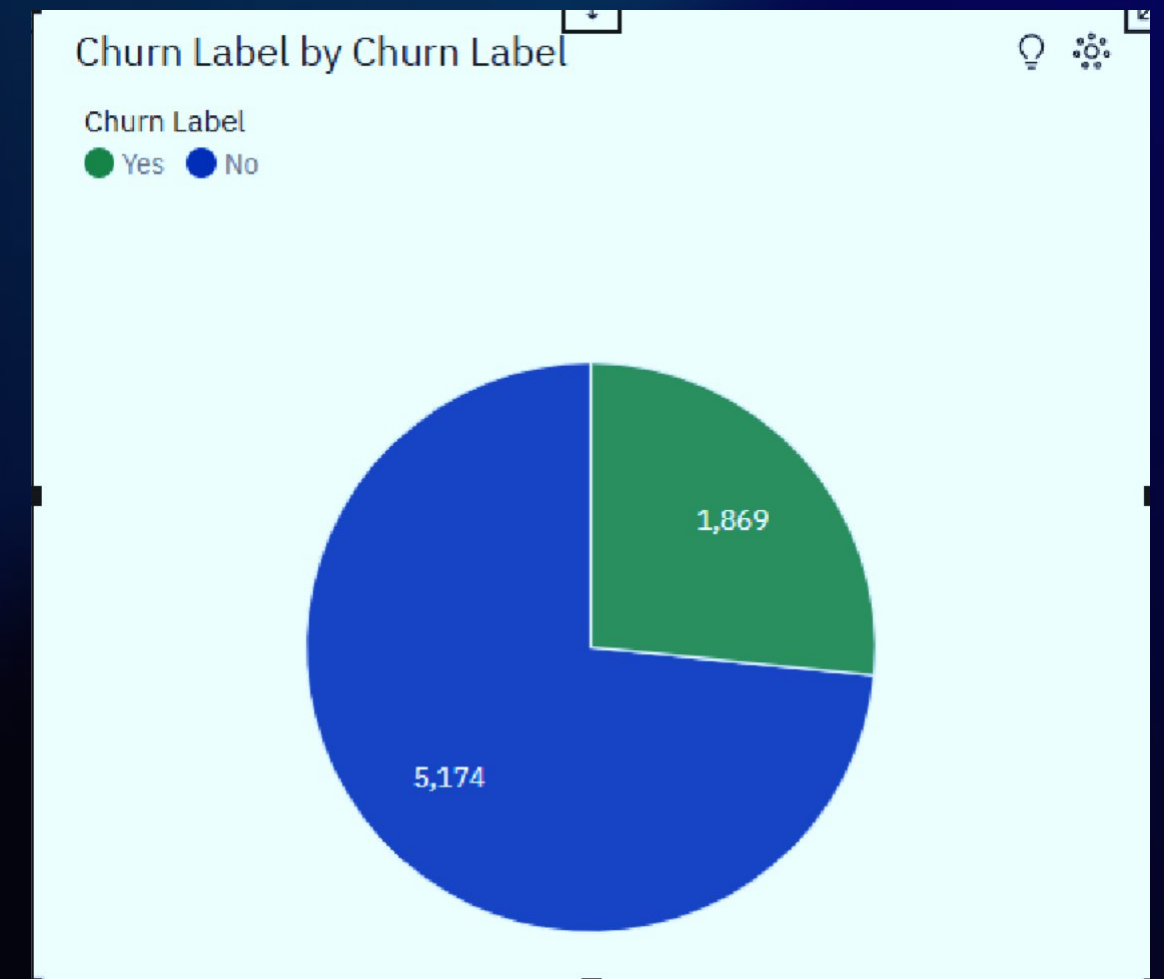
Our interactive dashboard provides a clear, concise summary of the churn situation, acting as the foundation for deeper analysis.

Churn Summary:

- **Churned:** 1,869 customers
- **Not Churned:** 5,174 customers

This initial breakdown sets the stage for understanding the scale of the churn problem.

Key metrics integrated into the dashboard include churn rate, average monthly charges, customer tenure, internet service type, and preferred payment methods, offering multifaceted views of the data.



Key Insights : Service Quality & Engagement

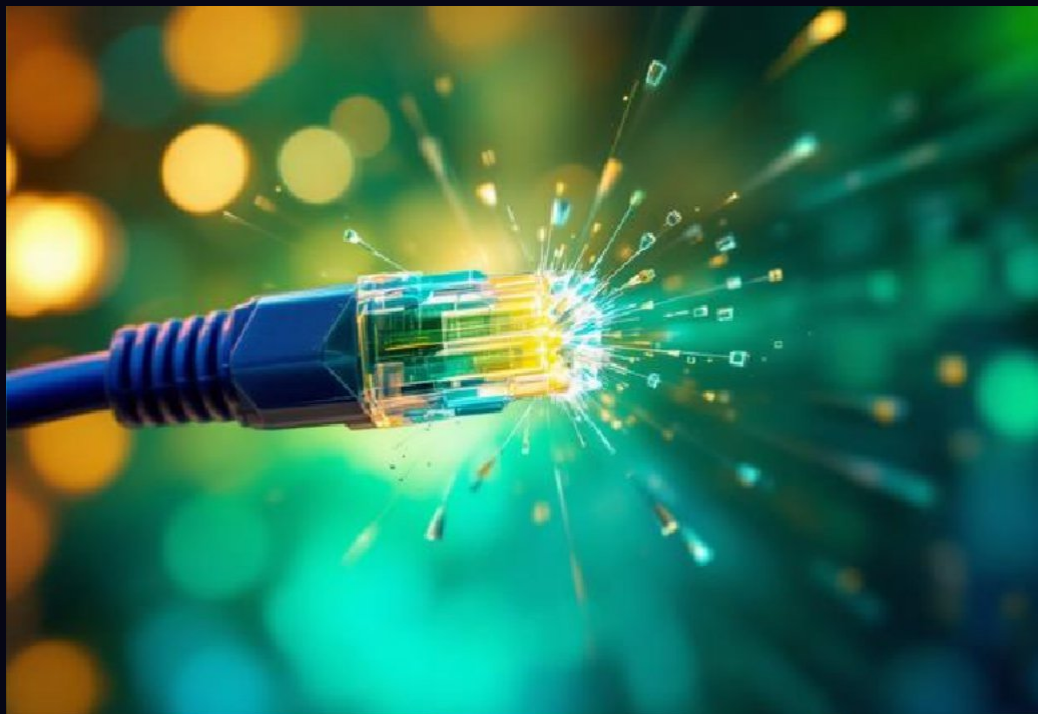
Beyond contractual and billing specifics, the type of service and customer engagement significantly influence retention.

Fiber Internet Users at Higher Churn

Risk

Despite offering high speeds, Fiber Internet users exhibit elevated churn. This could be attributed to:

- Persistent **network issues** or instability.
- Perception of **high pricing** compared to value.
- General **dissatisfaction with service** quality or support.



Add-on Services Reduce

Churn

Customers subscribing to value-added services like

Tech Support and **Security** add-ons demonstrate lower churn rates, indicating enhanced loyalty through perceived value and support.



Engagement Boosts

Loyalty

A high level of customer engagement, characterized by interaction with services and positive experiences, **strongly correlates with increased loyalty** and reduced churn intent.



Dashboard & Visualizations: A Data-Driven Story

Our interactive dashboard provides dynamic visualizations that bring these insights to life, allowing for granular exploration of churn patterns across various dimensions.



These visuals are instrumental in identifying vulnerable customer segments and areas requiring immediate attention. The sample visuals provided reflect the types of charts embedded within our interactive platform.

Conclusion: Strategizing for a Churn-Free Future

This telecom churn analytics project has successfully illuminated the intricate patterns and critical factors behind customer attrition.

By understanding **why customers leave**, companies can proactively implement retention strategies.

01 Identify Patterns

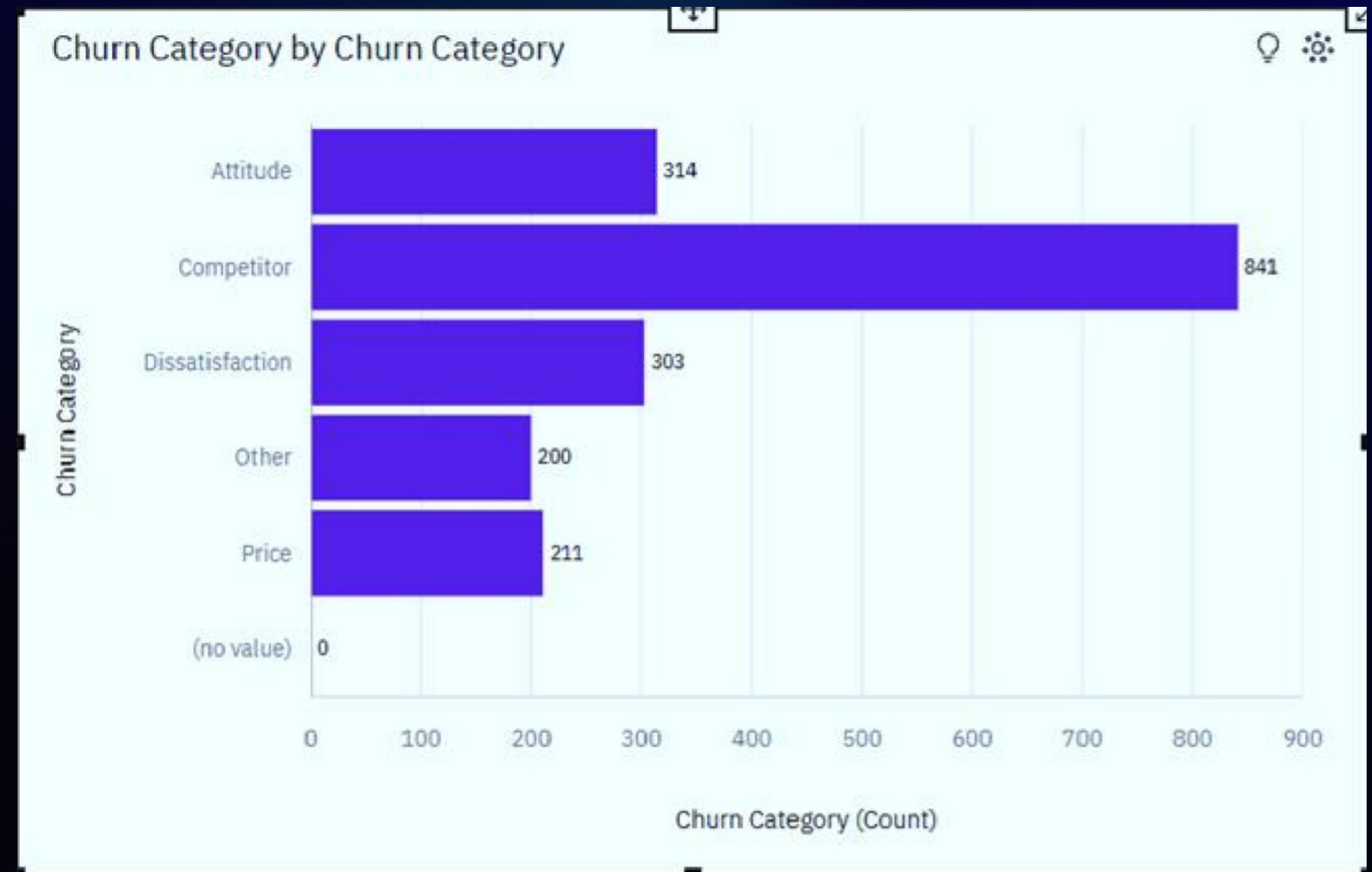
Understanding the 'why' behind customer exits is the first step in effective churn management.

02 Highlight Key Insights

Pricing, contract types, and service quality emerge as pivotal influences on customer loyalty.

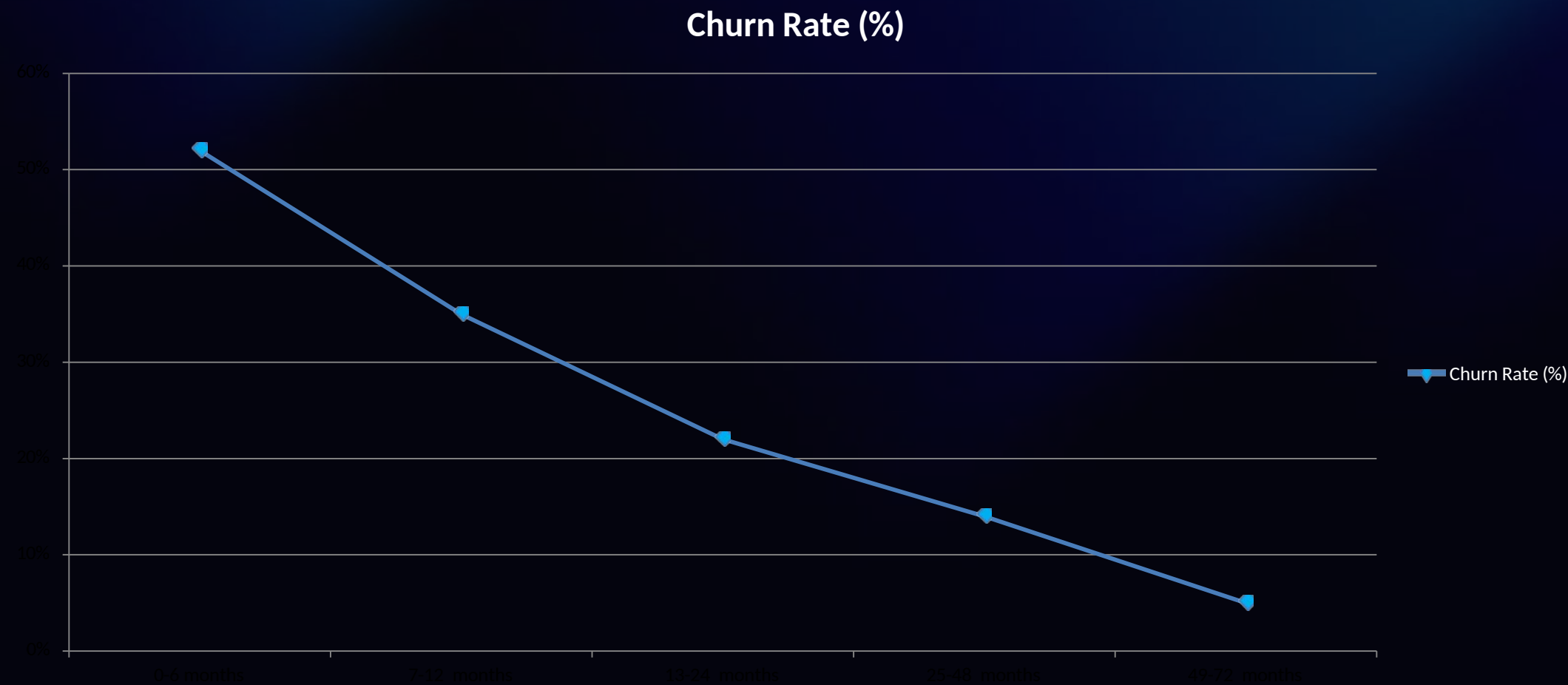
03 Implement Retention Strategies

Companies can significantly improve retention through targeted initiatives.



Strategic Pillars for Retention:

- **Flexible Plans:** Offer adaptable service packages to meet evolving customer needs.
- **Enhanced Onboarding:** Provide superior initial experiences to new customers.
- **Reliable Service:** Ensure consistent high-quality service and prompt issue resolution.
- **Personalized Offers:** Tailor promotions and services to individual customer profiles.



Thank
You