Non-Technical Presentation of Customer Churn of SyriaTel company.

Beginning - Introduction: Keeping Customers Happy at SyriaTel

Good morning/afternoon, everyone. I am here today to talk about a crucial topic for SyriaTel's success: **customer retention**. Specifically, we'll be discussing how we can better understand and predict **customer churn**, which is when customers decide to stop using our services. Our primary goal is to develop a system that helps us identify which customers are most likely to leave.

Business and Data Understanding - The Importance of Predicting Churn

Why is predicting customer churn so important for SyriaTel? Simply put, it's about protecting our revenue and ensuring sustainable growth. Losing customers directly impacts our bottom line. It's also significantly more cost-effective to retain an existing customer than to acquire a new one. By proactively identifying customers at risk of leaving, we can take targeted actions to address their needs, improve their experience, and ultimately keep them with SyriaTel.

To achieve this, we analyzed a variety of information related to our customers and their service usage. This included details about their accounts, how they use our network (e.g., call durations, data usage, charges), the service plans they've chosen, and their interactions with our customer support teams. This data provides valuable clues about potential churn behavior.

A System for Predicting Customer Behavior

To predict which customers are likely to leave, we employed a technique called **classification**. Imagine we're building a system that acts like a smart sorter, dividing our customers into two groups: those who are likely to *stay* with SyriaTel, and those who are at a higher risk of *leaving*. We explored different ways to create this "smart sorter," selecting the one that performed best.

The system we developed analyzes patterns within the customer data to identify those who exhibit behaviors similar to customers who have left in the past. This allows us to focus our attention on the customers who need our attention the most.

Evaluation - Measuring Our Predictive Power

How effective is our system at predicting which customers will leave? Here's what our analysis shows:

- Identifying At-Risk Customers: Our system is able to accurately identify a significant portion approximately 72% of the customers who are indeed likely to discontinue their service with SyriaTel. This gives us a valuable window of opportunity to engage with these customers and address their concerns.
- Accuracy of Churn Predictions: When our system indicates that a customer is
 at a high risk of leaving, it is correct in its prediction around 74% of the time. This
 provides us with a strong degree of confidence in the system's ability to pinpoint
 those customers who truly require our attention.
- Overall Predictive Accuracy: In general, our system demonstrates a high level of accuracy, correctly predicting whether a customer will remain with SyriaTel or leave approximately 92% of the time. This overall accuracy underscores the system's reliability.

Key Insights and Recommendations for SyriaTel

Our analysis has revealed several key factors that appear to be strong indicators of customer churn:

- **Total Day Charges:** Customers with higher charges for their daytime usage are more prone to leaving. This suggests that daytime pricing or usage patterns may be a source of dissatisfaction.
- **Customer Service Calls:** A higher number of calls to customer service is strongly correlated with increased churn risk. This highlights the critical importance of providing effective and efficient customer support.
- International Plan Subscription: Customers who have subscribed to an international plan show a higher likelihood of churning. This indicates a potential need to examine the value proposition, pricing, or service quality associated with these plans.

Based on these findings, we recommend that SyriaTel consider the following actions:

- Conduct a thorough review of daytime pricing structures to ensure they are competitive, transparent, and aligned with customer value.
- Invest in enhancing customer service operations to minimize customer frustration, resolve issues promptly, and improve overall satisfaction.
- Perform a detailed analysis of the international plan segment to understand their specific needs, identify potential pain points, and optimize plan offerings accordingly.

Implementing and Improving the Approach

The predictive system developed can be a powerful asset for SyriaTel. Here are some potential next steps:

- Integrate the system into existing Customer Relationship Management (CRM) systems to enable seamless identification of at-risk customers and facilitate targeted interventions.
- Utilize the system's predictions to trigger proactive customer engagement strategies, such as personalized communication, tailored offers, and proactive support, aimed at increasing retention.
- Continuously monitor and refine the system's performance by incorporating new data, exploring advanced modeling techniques, and adapting to evolving customer behavior patterns.
- Explore additional data sources and potential churn factors to gain an even more comprehensive understanding of customer attrition and identify new opportunities for intervention.

Thank You

Thank you for your time. I'm now happy to answer any questions you may have.