Executive Summary

Objective:

The purpose of this analysis is to investigate the primary factors that contribute to customer churn at Teco, focusing on elements like payment methods, contract types, and customer tenure. By identifying patterns and key contributors to churn, we aim to develop strategies to improve customer retention.

Key Insights & Findings:

1. **Contract Type and Churn:**

- **Churn Rate Analysis**: Customers on month-to-month contracts have the highest churn rate, with **42%** likely to churn. On the other hand, customers who are on one-year and two-year contracts exhibit churn rates of **11%** and **3%** respectively.
- **Implication**: Longer-term contracts appear to serve as an effective tool for customer retention. Encouraging customers to opt for one or two-year contracts could significantly reduce the likelihood of churn.

2. **Payment Methods and Churn:**

- **Churn Rate by Payment Method**:
- Customers paying via **electronic checks** have the highest churn rate, with **45%** leaving the service.
- In contrast, customers who use **credit cards, bank transfers, or mailed checks** have significantly lower churn rates, averaging between **15% to 18%**.
- **Implication**: The trust and convenience issues associated with electronic check payments may be driving customers away. Encouraging users to switch to more stable payment methods (credit card, bank transfer) may reduce churn.

3. **Churn by Tenure:**

- **Churn Rates by Tenure**:
- Customers with a tenure of **less than one year** are the most likely to churn, with a rate of **50%**.
 - Customers with **1-3 years** of tenure have a lower churn rate of **35%**.
- The churn rate for customers who have been with the company for **more than three years** drops to **15%**.
- **Implication**: Early customer engagement is critical, particularly during the first year. Tailored retention strategies should be designed to target new customers effectively.

4. **Churn by Internet Service Type:**

- **Fiber Optic vs. DSL**:
- Customers using **Fiber Optic** services have a higher churn rate of **30%**, compared to **DSL** users, whose churn rate is **20%**.

- **Implication**: Fiber Optic customers might be experiencing dissatisfaction due to competition or performance concerns. Investigating customer satisfaction with service quality could provide valuable insights for retention.

5. **Senior Citizens and Churn:**

- **Churn Rate by Age**:
 - Senior citizens (aged 65 and above) show a **41%** churn rate.
 - Non-senior citizens have a lower churn rate of **26%**.
- **Implication**: Senior citizens may require personalized services or targeted support programs to reduce their likelihood of churning.

Visual Insights & Data Representation:

- **1. Bar Charts & Line Graphs:**
- The bar charts in the analysis clearly highlight how **customers using electronic checks** churn almost three times more than customers using **credit cards or bank transfers**.
- Line graphs depicting **customer tenure vs. churn rate** show a sharp decline in churn rates as tenure increases, which stresses the importance of retention efforts in the early stages of the customer lifecycle.
- **2. Churn Rate Breakdown (Percentage Distribution):**
 - **Payment Method Churn**:
 - **Electronic checks**: **45%** churn rate.
 - **Credit cards, bank transfers, and mailed checks**: average of **15%** churn rate.
 - **Contract Types Churn**:
 - **Month-to-month contracts**: **42%** churn rate.
 - **One-year contracts**: **11%** churn rate.
 - **Two-year contracts**: **3%** churn rate.
 - **Customer Tenure**:
 - Customers with tenure of **less than one year**: **50%** churn rate.
 - Tenure of **1-3 years**: **35%** churn rate.
 - Tenure of **more than 3 years**: **15%** churn rate.

Recommendations:

- 1. **Promote Long-Term Contracts**:
- Offer incentives or special promotions for customers to commit to one-year or two-year contracts, as they have proven to significantly reduce churn rates.
- 2. **Address Payment Method Concerns**:

- Consider encouraging customers to transition from **electronic checks** to **credit cards or bank transfers** through targeted campaigns. Providing discounts or other benefits might further incentivize this switch.

3. **Focus on Early-Stage Engagement**:

- Since churn is highest within the first year, implementing customer loyalty programs or offering additional support to new customers during their first 12 months could improve retention rates.

4. **Senior Citizen Retention**:

- Senior citizens display significantly higher churn rates. Specialized service programs, discounts, or personalized customer support may help in retaining this demographic.

5. **Fiber Optic Service Improvement**:

- Investigate the reasons behind the higher churn rate among **Fiber Optic** users. Enhanced customer service and performance improvements could mitigate dissatisfaction and lower churn.

Conclusion:

This analysis provides a clear roadmap for addressing customer churn at Teco by identifying critical factors such as payment method, contract type, tenure, and demographic influences. Implementing the recommendations outlined above could significantly improve customer retention, particularly among at-risk groups like month-to-month contract holders and electronic check users.