Data Science Internship Assignment Report

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Dataset: Jumbo & Company – Device Insurance Attach Percentage

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Executive Summary

This report analyzes device insurance attach percentage for Jumbo & Company across branches and stores. The objective is to identify performance trends, categorize stores, and provide an indicative January attach percentage prediction to support business decision-making.

Data & Methodology

The dataset contains monthly attach percentage values from August to December. Data was cleaned and transformed from wide to long format to enable month-wise, branch-wise, and store-level analysis. Simple descriptive analytics and visualization techniques were applied.

Key Insights

• A gradual improvement in average attach percentage is observed from August to December. • Significant performance variation exists across branches and stores. • A small set of stores consistently outperform others, serving as benchmarks. • A large proportion of stores fall into the low-performing category, indicating scope for targeted improvement initiatives.

Store Categorisation

Stores were classified based on average attach percentage: • High Performing: ≥ 40% • Medium Performing: 25% – 40% • Low Performing: < 25% This categorisation enables focused business interventions and prioritization.

January Attach % Prediction

January attach percentage was predicted at store level using a linear regression model trained on historical data from August to December. Predictions are indicative in nature and capture overall trend direction rather than exact outcomes.

Business Recommendations

• Strengthen training and incentive programs for low-performing stores. • Replicate best practices from high-performing stores. • Leverage seasonal trends through focused insurance promotion campaigns. • Monitor attach percentage regularly to track improvement.

Conclusion

The analysis provides a concise view of attach percentage performance across Jumbo & Company. By combining descriptive insights with predictive trends, this report highlights key opportunities to improve insurance attachment performance.