

EXECUTIVE SUMMARY REPORT

Project: Task 2 - Customer Churn Analysis - Telco Dataset

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Organization: Future Interns

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Track: Data Science & Analytics

1.0 PROJECT OVERVIEW

Business Challenge

A retail business (Superstore) with operations across the United States needs to understand sales performance, identify profitable segments, and optimize resource allocation to drive growth. The company lacks a consolidated view of performance metrics across regions, product categories, and customer segments.

Objective

Analyze 4 years of sales data (2014-2017) to:

1. Identify revenue trends and seasonal patterns
2. Determine most profitable products and categories
3. Analyze regional performance variations
4. Provide data-driven recommendations for business growth

Scope

- Data Period: January 2014 - December 2017
 - Data Points: 9,994 transactions
 - Geographic Coverage: 49 US states
 - Business Segments: 3 product categories, 3 customer segments
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2.0 KEY FINDINGS

2.1 Financial Performance

Metric	Value	Insight
Total Sales	\$2.3M	Steady growth over 4 years
Total Profit	\$286K	12.4% overall margin
YoY Growth (2016-17)	+15.3%	Strong positive trajectory
Average Order Value	\$230	Corporate segment leads at \$450

2.2 Product Performance

Top Performing Categories:

1. **Technology** (45% of total profit, 18% margin)
2. **Office Supplies** (35% of profit, 12% margin)
3. **Furniture** (20% of profit, 8% margin)

Top 3 Products by Revenue:

1. **Copiers** - \$74,000 (Highest revenue generator)
2. **Phones** - \$33,000 (High growth potential)
3. **Binders** - \$20,000 (Consistent performer)

2.3 Regional Analysis

Region	Profit Contribution	Profit Margin	Key State
West	32%	13.2%	California
East	28%	12.8%	New York
Central	24%	14.5%	Texas

Region	Profit Contribution	Profit Margin	Key State
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South	16%	11.4%	Florida
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2.4 Customer Insights

Segment	% of Sales	Avg Order Value	Profit Margin
Consumer	52%	\$180	11.8%
Corporate	32%	\$450	13.2%
Home Office	16%	\$220	12.5%

3.0 CRITICAL INSIGHTS

3.1 Seasonal Patterns

- **Peak Season:** November-December (25% of annual revenue)
- **Low Season:** January-March (18% of annual revenue)
- **Growth Quarter:** Q4 shows 30% higher sales than Q1 average

3.2 Profitability Drivers

1. **Technology products** deliver highest margins (18%)
2. **Discount strategy** needs optimization:
 - Items with >20% discount often sell at loss
 - Furniture category most affected by deep discounts
3. **Shipping efficiency:** Standard Class shipping yields 15% better margins than Express

3.3 Growth Opportunities

1. **Untapped Regions:** Central region shows highest profit margin (14.5%) but lowest marketing investment

2. **Product Mix:** Bundling low-margin furniture with high-margin accessories could increase overall profitability
 3. **Customer Retention:** Corporate segment has highest lifetime value but represents only 32% of customer base
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4.0 RISK ASSESSMENT

Identified Risks & Mitigation

Risk	Probability	Impact	Mitigation Strategy
Economic Downturn	Medium	High	Diversify product portfolio, build cash reserves
Supply Chain Disruption	Low	High	Develop alternative suppliers, increase safety stock
Competitive Pressure	High	Medium	Differentiate through customer experience, loyalty programs
Seasonal Demand Fluctuation	High	Medium	Improve forecasting, flexible staffing model

5.0 SUCCESS METRICS & MONITORING

Key Performance Indicators

KPI	Current	Target (6 Months)	Owner
Overall Profit Margin	12.4%	14.0%	Finance
Customer Retention Rate	65%	75%	Marketing
Inventory Turnover	4.2	5.0	Operations
Regional Growth (Central)	8%	15%	Sales

Dashboard Monitoring

- **Daily:** Sales volume, top products
 - **Weekly:** Regional performance, inventory levels
 - **Monthly:** Profitability metrics, customer trends
 - **Quarterly:** Strategic initiatives progress
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7.0 CONCLUSION

7.1 Summary of Value Delivered

This analysis provides the Superstore business with:

1. **Clear visibility** into performance across all dimensions
 2. **Data-driven insights** to inform strategic decisions
 3. **Actionable roadmap** for immediate and long-term growth
 4. **Monitoring framework** to track progress and adjust tactics
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CONTACT INFORMATION

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