**Walmart Sales and Profitability Performance Analysis Report**

**1.0 EXECUTIVE SUMMARY**

This analysis examines Walmart's sales performance across 100 branches from 2019 to 2023, covering 9,969 transactions generating $1.21 million in total revenue. The report identifies key performance drivers, profitability metrics, and inventory efficiency across product categories to provide strategic insights for business optimization.

**Key Highlights:**

* Total net profit: $476,139 with consistent 40% average profit margin
* Fashion Accessories and Home & Lifestyle dominate revenue generation
* Strong seasonal performance in Q4 with peak revenue of $105K in 2023
* Digital payment methods (credit cards and e-wallets) represent over 80% of transactions

**2.0 METHODOLOGY**

**2.1 Data Sources and Tools**

* **Primary Dataset**: 9,969 transactional records from Walmart branches (2019-2023)
* **Analytical Tools**: Python, PostgreSQL, Tableau
* **Database Management**: DBeaver, VS Code
* **Statistical Analysis**: Pandas, Seaborn, Matplotlib

**2.2 Analytical Framework**

The analysis employed quantitative methods including:

* Descriptive statistics for performance metrics
* Time-series analysis for trend identification
* Category-wise comparative analysis
* Inventory turnover calculations
* Profit margin optimization assessment

**3.0 KEY FINDINGS**

**3.1 Revenue Performance**

**Total Revenue**: $1,209,726  
**Transaction Volume**: 9,969 transactions across 100 branches  
**Seasonal Trends**: Consistent Q4 peak performance with 2023 Q4 revenue reaching $105,000

**3.2 Category Performance Analysis**

**3.2.1 Average Order Value (AOV) Leaders**

1. **Sports & Travel**: Highest AOV
2. **Health & Beauty**: Second highest AOV
3. **Food & Beverages**: Third highest AOV

*Insight: These categories demonstrate effective strategies for driving higher-value purchases*

**3.2.2 Gross Merchandise Value (GMV) Leaders**

1. **Fashion Accessories**: $489,481 GMV
2. **Home & Lifestyle**: $489,250 GMV
3. **Electronic Accessories**: $78,175 GMV

*Note: Significant GMV drop between top two categories and remaining segments*

**3.3 Profitability Analysis**

**3.3.1 Net Profit Margin Performance**

| Category | Net Profit Margin |
| --- | --- |
| Food & Beverages | 40.31% |
| Health & Beauty | 39.85% |
| Electronic Accessories | 39.36% |
| Fashion Accessories | 39.29% |
| Home & Lifestyle | 39.29% |
| Sports & Travel | 39.27% |

**Key Insight**: All categories maintain strong, consistent profit margins between 39-40%, indicating effective cost control across operations.

**3.4 Inventory Management Efficiency**

**3.4.1 Inventory Turnover Leaders**

1. **Home & Lifestyle**: 139,709 turnover rate
2. **Fashion Accessories**: 139,702 turnover rate
3. **Electronic Accessories**: 13,294 turnover rate

**Critical Finding**: Significant turnover gap between top-performing categories and others, suggesting potential inventory optimization opportunities in lower-performing segments.

**3.5 Category or Product Behavior Insights**

* **Average Product Rating**: 5.83/10
* **Payment Method Distribution**: Credit cards and e-wallets dominate (80%+)
* **Purchase Patterns**: High-value customers prefer Sports & Travel, Health & Beauty, and Food & Beverages categories

**4.0 STRATEGIC RECOMMENDATIONS**

**4.1 Revenue Growth Initiatives**

1. **Category Portfolio Optimization**
   * Increase marketing investment in high-AOV categories (Sports & Travel, Health & Beauty)
   * Develop cross-selling strategies between high-GMV and high-AOV categories
   * Implement targeted campaigns for underperforming segments (Electronics, Food & Beverages)
2. **Seasonal Revenue Management**
   * Leverage Q4 momentum through advanced inventory planning and promotional activities
   * Develop mid-year (Q2-Q3) engagement strategies to balance annual revenue distribution
   * Implement loyalty programs to maintain customer engagement during off-peak periods

**4.2 Profitability Enhancement**

1. **Margin Optimization**
   * Conduct cost structure analysis for Fashion Accessories and Home & Lifestyle categories
   * Replicate Food & Beverages' margin efficiency strategies across other categories
   * Review supplier contracts and procurement processes for cost reduction opportunities
2. **Pricing Strategy Refinement**
   * Implement value-based pricing for high-AOV categories
   * Develop strategic bundling for lower-performing categories to increase average transaction value
   * Monitor competitive pricing in high-margin segments

**4.3 Operational Efficiency**

1. **Inventory Management**
   * Optimize stock levels for high-turnover categories (Home & Lifestyle, Fashion Accessories)
   * Implement inventory reduction strategies for slow-moving categories
   * Develop SKU rationalization program for low-turnover segments
2. **Payment System Enhancement**
   * Capitalize on digital payment preference through enhanced e-wallet integration
   * Develop loyalty incentives for preferred payment methods
   * Implement secure, streamlined payment processing systems

**5.0 RISK ASSESSMENT AND MITIGATION**

**5.1 Identified Risks**

* **Revenue Concentration Risk**: Over-reliance on two primary categories (Fashion Accessories, Home & Lifestyle)
* **Seasonal Dependency**: Significant revenue concentration in Q4
* **Inventory Carrying Costs**: Potential capital lock-up in low-turnover categories

**5.2 Mitigation Strategies**

1. **Diversification**: Expand marketing efforts for underperforming categories
2. **Year-Round Engagement**: Develop continuous customer engagement programs
3. **Inventory Optimization**: Implement just-in-time inventory for low-turnover categories

**6.0 PERFORMANCE MONITORING FRAMEWORK**

**6.1 Key Performance Indicators (KPIs)**

* **Financial**: Revenue growth rate, profit margin, AOV
* **Operational**: Inventory turnover, stock-to-sales ratio
* **Customer**: Satisfaction ratings, payment method adoption

**6.2 Reporting Frequency**

* **Daily**: Transaction volume, revenue tracking
* **Weekly**: Category performance, inventory levels
* **Monthly**: Comprehensive profitability analysis
* **Quarterly**: Strategic review and adjustment

**7.0 CONCLUSION**

The analysis demonstrates Walmart's strong market position with consistent profitability across all categories. The key opportunities for growth and optimization lie in:

* Leveraging high-performing categories while addressing portfolio balance
* Capitalizing on digital payment trends
* Optimizing inventory management across category segments
* Enhancing year-round revenue stability through strategic engagement initiatives

The recommended strategies provide a roadmap for sustained growth, improved operational efficiency, and enhanced customer value proposition.

**Report Created**: 22-10-2025  
**Data Period**: 2019-2023  
**Sample Size**: 9,969 transactions  
**Confidence Level**: High (comprehensive data coverage across 100 branches)