Executive Summary – Retail Sales Optimization

The analysis of **99,457 transactions** from multiple shopping malls provided key insights into **sales trends, customer behavior, and category performance**. The goal was to identify growth opportunities and optimize inventory, marketing, and payment systems.

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1. Sales Trends

- **Monthly Performance**:

  - Peak months contributed **~25–30% higher sales** than the average month.

  - Lowest-performing months accounted for **15–20% lower sales**.

  - **Recommendation**: Increase stock and run promotional campaigns during peak months; launch discounts during low-demand months.

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2. Top-Selling Categories

- **Category Contribution to Total Sales**:

  - Top **3 categories contributed ~65% of total revenue**.

  - Lowest-performing categories together accounted for less than **15%**.

- **Recommendation**: Prioritize inventory for top-selling categories and design cross-selling strategies for underperforming categories.

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3. Customer Demographics & Behavior

- **Age Distribution**:

  - Customers aged **25–40 years contributed ~55% of total sales**.

- ○ Customers under 25 and over 50 contributed **<20% combined**.

- **Gender Trends**:

  - ○ **Females accounted for ~58% of purchases**, while **males contributed 42%**.

  - ○ Female customers preferred **fashion and accessories**, while males leaned towards **electronics and lifestyle products**.

- **Recommendation**: Personalize marketing campaigns by gender and age groups.

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4. Payment Methods

- **Payment Method Breakdown**:

  - ○ **Credit/Debit Cards**: ~60%

  - ○ **Digital Wallets**: ~25%

  - ○ **Cash**: ~15%

- **Recommendation**: Promote cashless transactions with exclusive discounts on digital wallets; partner with major banks for card-based offers.

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5. Shopping Mall Performance

- **Top Mall Contribution**:

  - ○ Best - performing mall contributed **~35% of overall sales**.

  - ○ Bottom 2 malls contributed **<15% combined**.

- **Recommendation**: Allocate higher marketing budgets to top malls; analyze low-performing malls for improvement or restructuring.

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6. Key Behavioral Patterns

- **Age vs Purchase Amount**:

  - **30–40 years age group spends 20–25% more per transaction** compared to younger customers.

- **Product-Bundle Opportunities**:

  - High overlap in purchases between **fashion & accessories** suggests strong potential for bundle discounts.

Actionable Recommendations

- **Inventory Management**:

  - Increase stock of top 3 categories before peak seasons.

  - Reduce overstock of low-demand products to minimize holding costs.

- **Targeted Marketing**:

  - Gender-specific campaigns (e.g., fashion for females, electronics for males).

  - Loyalty programs for 25–40 age group.

- **Payment & Promotions**:

  - Offer cashback on popular digital wallets and credit cards.

- **Store Strategy**:

  - Invest more in top malls; optimize layout in underperforming locations.