Case Study Submission - Business Analyst (Growth)

This case study analyzes apparel design trends based on product features and monthly sales data.

The goal is to identify emerging and declining patterns to guide business growth strategy for Snitch.

1. Trend Analysis

CATEGORY Trends

Top Upcoming Trends:

- Shirts: +33217
- T-Shirts: +24690
- Trousers: +21741

Vanishing Trends:

- Overshirt: +983
- Sweatshirts: -260
- Pyjamas: -527

OCCASSION_NEW Trends

Top Upcoming Trends:

- Casual Wear: +96585
- Formal Wear: +12620
- Others: +1612

Vanishing Trends:

- Festive Wear: +1
- Sleep and Lounge Wear: -527
- Elevated: -5940

PRINT_DESIGN Trends

Top Upcoming Trends:

- Plain: +43275

- Solid: +20785

- Self-Design, Textured: +13100

Vanishing Trends:

- Printed, Geometric: -3199

- Textured, Self-Design: -4066

- Printed, Abstract: -4215

2. Feature Composition (Month 12)

CATEGORY Composition (Month 12)

- Shirts: 52.18%

- T-Shirts: 16.79%

- Trousers: 12.0%

- Jeans: 11.48%

- Cargo Pants: 4.06%

OCCASSION_NEW Composition (Month 12)

- Casual Wear: 84.5%

- Formal Wear: 12.15%

- Elevated: 3.01%

- Club Wear: 0.17%

- Others: 0.11%

PRINT_DESIGN Composition (Month 12)

- Plain: 38.18%
- Solid: 9.94%
- Textured, Self-Design: 8.92%
- Checks: 8.92%
- Stripes: 5.61%

3. Assumptions

- Missing or ambiguous feature values (e.g., NaN or 'Others') were included in analysis as-is.
- MONTH3 to MONTH12 are assumed to be sequential and represent sales volume per month.
- Trend identification is based on aggregate delta between early months (3-6) and late months (9-12).
- Only top 5 values are shown in the composition analysis for clarity.

4. Visual Trends

Refer to the attached image 'feature_trends.png' for visualizations of normalized sales trends over time by key features.