Executive Insight Report

Generated: December 03, 2025

Executive Summary

Analysis unavailable - Please check Grok API connection and credentials.

Key Findings

Analysis unavailable - Please check Grok API connection and credentials.

Recommendations

Analysis unavailable - Please check Grok API connection and credentials.

Data Quality Report

• Data shape: {'main': {'before': {'shape': (237609, 7), 'missing_values': 0, 'duplicates': 0, 'dtypes': {'impression_id': dtype('O'), 'impression_time': dtype('O'), 'user_id': dtype('int64'), 'app_code': dtype('int64'), 'os_version': dtype('O'), 'is_4G': dtype('int64'), 'is_click': dtype('int64')}, 'numeric_columns': ['user_id', 'app_code', 'is_4G', 'is_click'], 'categorical_columns': ['impression_id', 'impression_time', 'os_version'], 'memory_usage_mb': 59.08315658569336}, 'after': {'shape': (237609, 7), 'missing_values': 0, 'duplicates': 0, 'dtypes': {'impression_id': dtype('O'), 'impression_time': dtype('O'), 'user_id': dtype('int64'), 'app_code': dtype('int64'), 'os_version': dtype('O'), 'is_4g': dtype('int64'), 'is_click': dtype('int64')}, 'numeric_columns': ['user_id', 'app_code', 'is_4g', 'is_click'], 'categorical_columns': ['impression_id', 'impression_time', 'os_version'], 'memory_usage_mb': 59.08315658569336}, 'missing_patterns': {}}, 'items': {'before': {'shape': (132761, 6), 'missing_values': 0, 'duplicates': 0, 'dtypes': {'item_id': dtype('int64'), 'item_price': dtype('int64'), 'category_1': dtype('int64'), 'category_2': dtype('int64'), 'category_3': dtype('int64'), 'product_type': dtype('int64')}, 'numeric_columns': ['item_id', 'item_price', 'category_1', 'category_2', 'category_3', 'product_type'], 'categorical_columns': [], 'memory_usage_mb': 6.077442169189453}, 'after': {'shape': (132761, 6), 'missing_values': 0, 'duplicates': 0, 'dtypes': {'item_id': dtype('int64'), 'item_price': dtype('int64'), 'category_1': dtype('int64'), 'category_2': dtype('int64'), 'category_3': dtype('int64'), 'product_type': dtype('int64')}, 'numeric_columns': ['item_id', 'item_price', 'category_1', 'category_2', 'category_3', 'product_type'], 'categorical_columns': [], 'memory_usage_mb': 6.077442169189453}, 'missing_patterns': {}}}

• All data processed and validated