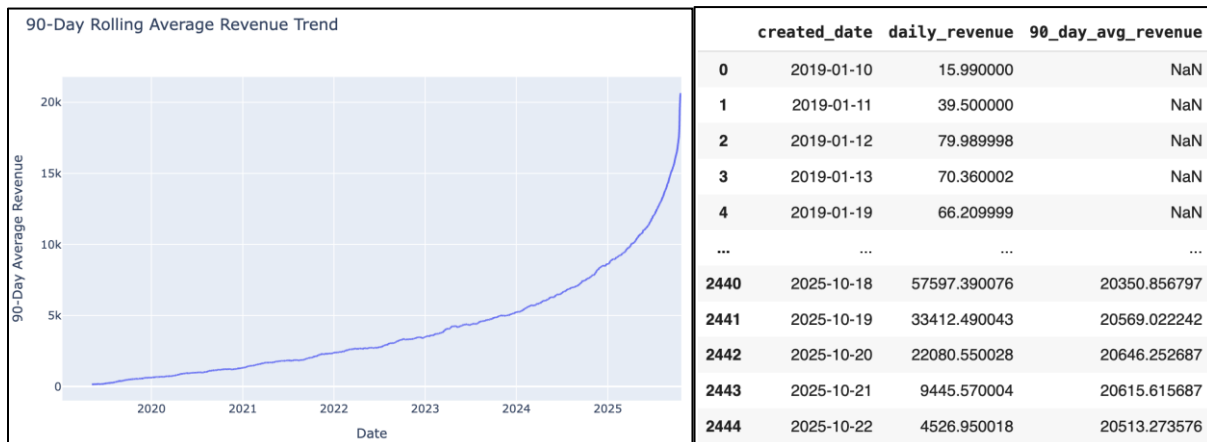# Executive Brief

The *thelook_ecommerce* dataset represents a fictional online fashion retailer called "The Look." The data includes customer demographics, orders, product catalogs, and website activity between 2019–2022. It simulates a real-world e-commerce business environment and enables data professionals to analyze customer behavior, sales trends, and operational performance. Using this dataset, we can uncover insights into revenue drivers, customer retention, and seasonal demand patterns — all essential for data-driven decision-making in retail.

To begin with, the top 3 growth KPIs were a 90-day average revenue trend, repeat purchase rate, and the average order value. Each of these metrics tells something unique about the e-commerce dataset. For example, the 90-day average revenue trend line shows a general upward movement over time, indicating that the business has been experiencing consistent growth in its revenue over the long term. The values, which stabilize in the $20,000s range further down the rows, suggest a healthy and sustained revenue performance after the initial period. See the images below.

	created_date	daily_revenue	90_day_avg_revenue
0	2019-01-10	15.990000	NaN
1	2019-01-11	39.500000	NaN
2	2019-01-12	79.989998	NaN
3	2019-01-13	70.360002	NaN
4	2019-01-19	66.209999	NaN
...	...	...	...
2440	2025-10-18	57597.390076	20350.856797
2441	2025-10-19	33412.490043	20569.022242
2442	2025-10-20	22080.550028	20646.252687
2443	2025-10-21	9445.570004	20615.615687
2444	2025-10-22	4526.950018	20513.273576

Then, the repeat purchase rate tells us about the proportion of users who have made more than one purchase. This is approximately 37.45% and is a key indicator of customer loyalty and satisfaction. A higher repeat purchase rate generally suggests that customers are happy with the products and service and are likely to continue doing business with the company. But in this dataset, the repeat purchase rate is low, which is quite common in the ecommerce industry. But steps can be taken to improve this metric for the long-term profitability of the business. See image below.

	total_users	repeating_users	repeat_purchase_rate
0	80010	29966	0.374528

The average order value for this business was $86.27, and it is a moderate value, representing the average amount of money that a customer spends per order. This metric is crucial for understanding customer spending habits and the overall financial health of the business.

The month-over-month (MoM) and year-over-year (YoY) growth percentages for both orders and revenue showed a general upward trend over time. This indicates that the business is experiencing consistent expansion year after year. However, the MoM and daily growth percentages show more significant fluctuations, moving between positive and negative values. This is typical in e-commerce and often indicates seasonality. For example, there are likely periods within the year where sales and order volume are higher (e.g., holidays, specific sales events) and periods where they are lower. The fluctuations in MoM growth specifically highlight these monthly patterns. The YoY growth provides a clearer picture of the long-term health and growth of the business by filtering out short-term noise and seasonal effects. See the images below.
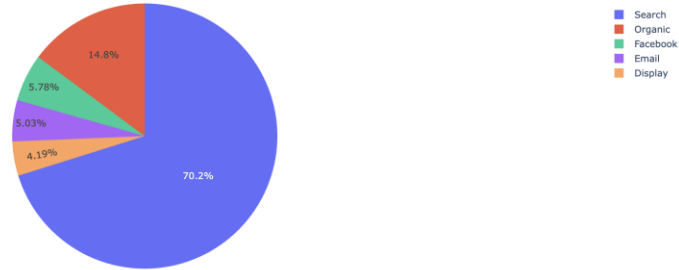
	order_date	daily_revenue	daily_growth_percentage	mom_growth_percentage	yoy_growth_percentage
0	2019-01-10	15.990000	NaN	NaN	NaN
1	2019-01-11	39.500000	147.029397	NaN	NaN
2	2019-01-12	79.989998	102.506324	NaN	NaN
3	2019-01-13	70.360002	-12.039001	NaN	NaN
4	2019-01-19	66.209999	-5.898241	NaN	NaN
...	...	...	...	...	...
2440	2025-10-18	57597.390076	-2.878256	193.663765	519.149022
2441	2025-10-19	33412.490043	-41.989576	92.150482	320.784658
2442	2025-10-20	22080.550028	-33.915281	33.637662	184.508706
2443	2025-10-21	9445.570004	-57.222216	-52.962136	-0.715290
2444	2025-10-22	4526.950018	-52.073300	-73.938577	-48.407769

	order_date	daily_orders	mom_growth_percentage	yoy_growth_percentage
0	2019-01-09	2	NaN	NaN
1	2019-01-10	1	NaN	NaN
2	2019-01-13	1	NaN	NaN
3	2019-01-19	1	NaN	NaN
4	2019-01-23	1	NaN	NaN
...	...	...	...	...
2430	2025-10-14	610	211.224490	548.936170
2431	2025-10-15	881	315.566038	763.725490
2432	2025-10-16	1506	597.222222	1391.089109
2433	2025-10-17	566	159.633028	558.139535
2434	2025-10-18	570	156.756757	506.382979

The total revenue recorded in the last 30 days is $937,508.93 and is a key metric that tells us about the recent sales performance of the business. Furthermore, 70.2% of the sales were driven by search as a major traffic source, followed by organic, Facebook, email, and display. However, the sales percentage by region was evenly distributed among the top 10 regions. For example, 18.5% of the sales were driven by Guangdong, which is a populous province in China. The top 5 product categories that dominated sales were outerwear & coats, jeans, sweaters, fashion hoodies & sweatshirts, suits & sport coats. This indicated that these products are globally used and have greater demand when compared to other product categories. See the images below.
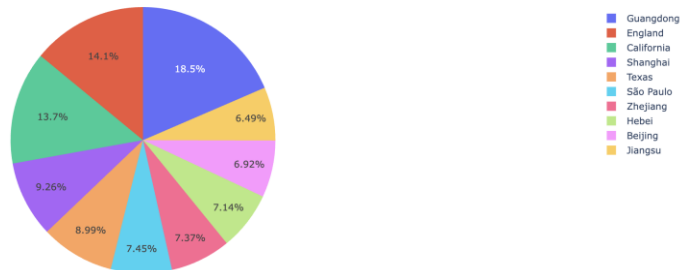
Scorecard: Total Revenue Last 30 Days

Total Revenue Last 30 Days:
$937,508.93

Sales Percentage by Traffic Source

Legend:
- Search
- Organic
- Facebook
- Email
- Display

14.8%
5.78%
5.03%
4.19%
70.2%

Sales Percentage by Region (Top 10)

Legend:
- Guangdong
- England
- California
- Shanghai
- Texas
- São Paulo
- Zhejiang
- Hebei
- Beijing
- Jiangsu

18.5%
14.1%
13.7%
9.26%
8.99%
7.45%
7.37%
7.14%
6.92%
6.49%

Top 5 Product Categories by Sales

Total Sales (y-axis): 0, 0.2M, 0.4M, 0.6M, 0.8M, 1M, 1.2M

Product Category (x-axis): Outerwear & Coats, Jeans, Sweaters, Fashion Hoodies & Sweatshirts, Suits & Sport Coats
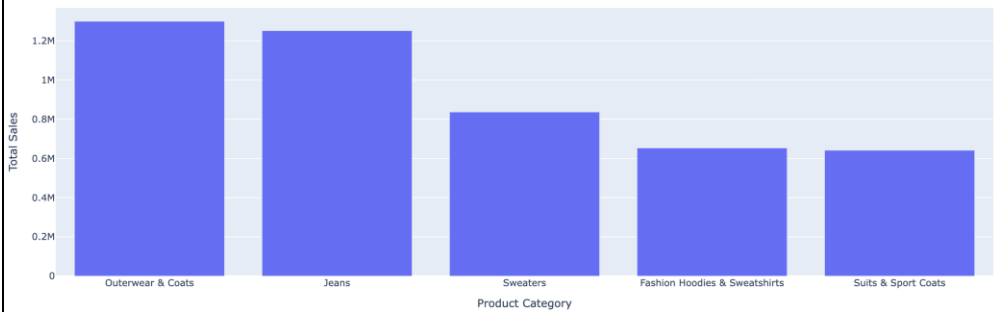
In conclusion, the dataset shows that the business is doing relatively well yearly. However, the first recommendation about improving this ecommerce business would be increasing its repeat purchase rate through a targeted customer retention program focusing on users who have made only a single purchase. The second recommendation would be to conduct a deeper profitability analysis by traffic sources and optimize marketing investment based on customer lifetime value (CLTV) rather than just acquisition volume.