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UNBOXED

Sales Insights & Recommendations

Rui Gao-Hankinson, Data Team

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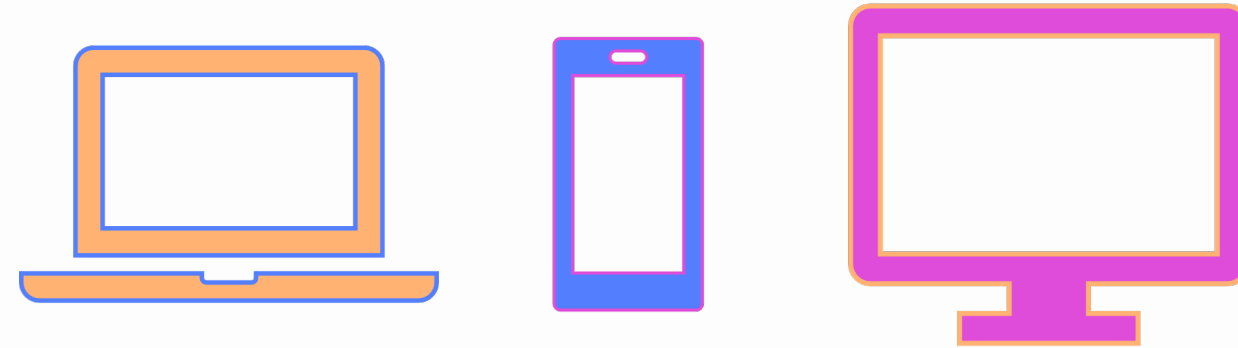
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Overview

Project Overview



The goal of this project is to conduct an exploratory analysis to **understand Unboxed's sales performance pre- and post-pandemic** (2019 to 2022) to form initial recommendations for the marketing and inventory management teams for further areas of exploration.

Though the company experienced a significant sales boost during COVID-19, **sales have significantly decreased since the pandemic.**

North Star Metrics

KEY METRICS

Revenue

Total sales generated (USD)

Order count

Number of orders placed

Average order value (AOV)

Average dollar value of a customer's purchase

Repeat customer rate

Percent of customers who have made more than one purchase

KEY DIMENSIONS

Loyalty program

Product mix

Marketing channels

North Star Metrics

KEY METRICS

Revenue

The **total revenue** generated from 2019 to 2022 was **\$28M**, with an **average yearly revenue of \$7M**.

Order count

A total of **108K** orders were placed, with a **range of 16.8K to 35.9K orders per year**.

Average order value (AOV)

On average, customers spent **\$260** per order.

Repeat customer rate

From 2019 to 2022, the average repeat customer rate was **2.5%** across a total of **88K** customers.

Compared to industry benchmarks, Unboxed **outperforms competitors** in terms of **AOV**, but **underperforms** in terms of **repeat customer rate**.

Insights Deep-Dive

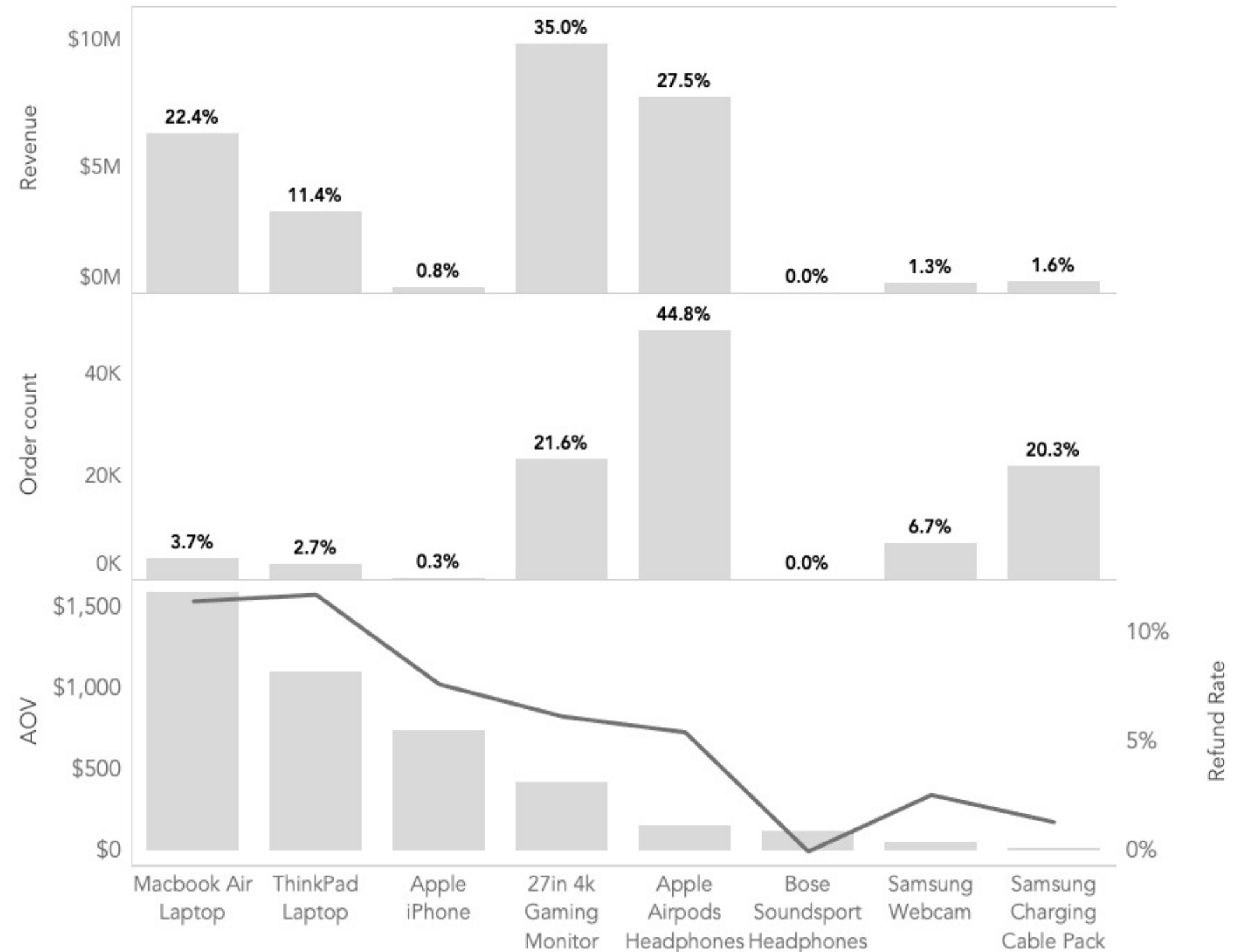
The pandemic drove record-breaking sales figures across all markets, but trends could not be sustained post-pandemic.

- In 2020, **AOV rose by 31% and order count doubled**, driving the **highest yearly revenue** on record (\$10M, a 163% increase from the previous year).
- 2022 saw a slump in sales: **Revenue fell by 46%** from the previous year, driven by a significant **decrease in order count (down 40%)** from the previous year).

	AOV	Order count	Revenue	AOV (GR)	Order count (GR)	Revenue (GR)
2019	\$230	16,850	\$3,868,907			
2020	\$300	33,851	\$10,158,439	31%	101%	163%
2021	\$255	35,858	\$9,127,894	-15%	6%	-10%
2022	\$230	21,565	\$4,957,580	-10%	-40%	-46%
Grand Total	\$260	108,124	\$28,112,821			

The bulk of business is concentrated on four products, indicating significant product concentration.

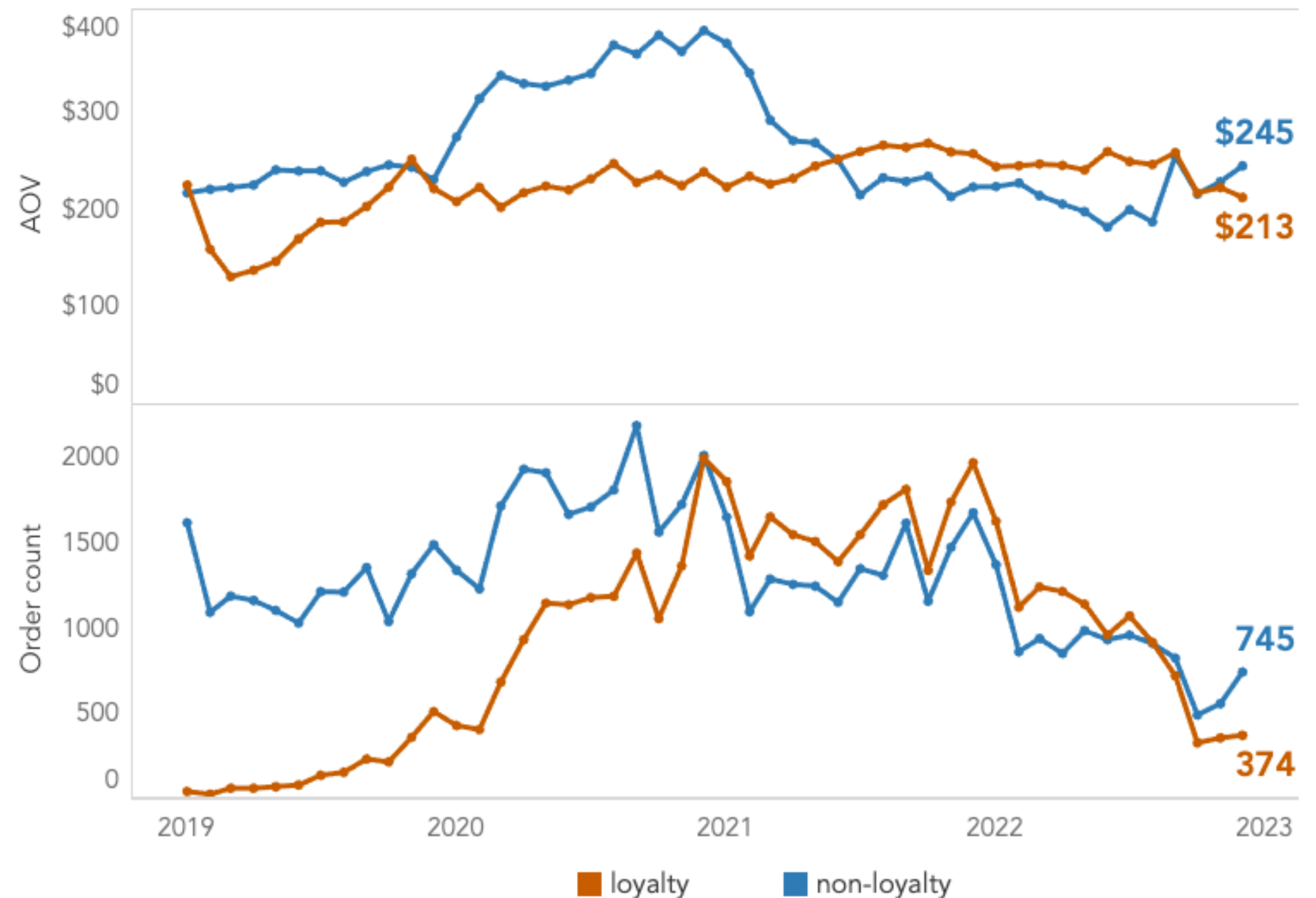
- Overall, 4 out of the company's 8 product offerings accounted for **96% of the total revenue** across all years.
- The Apple AirPods Headphones are the best-selling product, accounting for **45% of all sales** (\$7.7M in revenue), while the 27in Gaming Monitor **generated the most revenue** (\$9.9M).
- There appears to be a **positive correlation** between product value and refund rate; the four highest-ticket items also had the **highest refund rates** (7.6% to 11.7%).



The effectiveness of the loyalty program has increased in recent years.

- In 2019 and 2020, loyalty customers placed fewer and less expensive orders than non-loyalty customers.
- Trends **reversed** in recent years: From 2021 to 2022, **loyalty customers placed more orders** and spent an average of **\$30 (14%) more per order** than non-loyalty customers in 2022.
- Q4 2022 trends suggest the loyalty program's recent strong performance may be starting to falter.

Trends in AOV and order count, non-loyalty vs. loyalty program customers



Affiliate marketing is most effective marketing channel for driving repeat customer rate.

- Unboxed's repeat customer rate is **increasing year-by-year, up 2.7 percentage points** from 2020 (1.9%) to 2022 (4.6%), but still falls behind the industry benchmark of 20% to 30%.
- Affiliate marketing had the highest repeat customer rate across all years (**4.4%**), even though direct marketing drove the most customers by far (**30x higher** than affiliate marketing at **68K**).
- Until 2022, social media marketing had the second highest repeat customer rate. Direct marketing outperformed social media marketing that year.

		Repeat Customers	Total Customers	Repeat Customer Rate =
2020	Total	515	27,737	1.9%
	affiliate	31	810	3.8%
	social media	9	408	2.2%
	direct	439	21,773	2.0%
	email	36	4,568	0.8%
	unknown	0	27	0.0%
	Null	0	151	0.0%
2021	Total	957	29,972	3.2%
	affiliate	39	540	7.2%
	social media	12	300	4.0%
	Null	6	163	3.7%
	direct	827	22,959	3.6%
	email	73	5,987	1.2%
	unknown	0	23	0.0%
2022	Total	850	18,528	4.6%
	affiliate	30	365	8.2%
	direct	729	13,441	5.4%
	social media	6	152	3.9%
	email	82	3,716	2.2%
	Null	3	848	0.4%
	unknown	0	6	0.0%

	Repeat Customers	Total Customers	Repeat Customer Rate =
affiliate	98	2,237	4.4%
direct	1,911	67,512	2.8%
social media	24	1,077	2.2%
email	187	15,580	1.2%
Null	8	1,153	0.7%
unknown	0	66	0.0%
Grand Total	2,228	87,625	2.5%

Note: Some records have no marketing channel data and thus show up as 'null' in the table – this affects <5% of rows, but should be investigated to ensure this is not a data collection or ETL pipeline issue.

Recommendations & Next Steps

Key Recommendations

Marketing

Loyalty program: Continue the loyalty program, since this segment of customers has been placing more orders, as well as more expensive orders, than non-loyalty customers in recent years.

Repeat customer rate: Investigate reasons why affiliate marketing has the highest repeat customer rate; consider increasing investment in this marketing channel to continue to boost reach and increase retention.

Inventory Management

Product mix: Consider expanding offerings anchored on 4 top-performing products, such as performance- or useability-enhancing accessories. Replace low-performing products, which accounted for <1% of revenue and orders, with these new offerings.

Monitor stock levels: Given the current significant product concentration, ensure inventory strategy is optimized to minimize stockout events.

Recommendations center on:

- 1) **Boosting retention and engagement** with high-value customers;
- 2) **Consolidating and expanding product mix** around top-performing anchors.

Caveats and Next Steps

For further analysis and future steps, consider the following:

Improved data quality and availability

- ❑ Include marketing metrics like **click-through rate, impressions, and cost per click** to better evaluate the performance of marketing channels
- ❑ Investigate missing marketing channel data in some transaction records

Include other dimensions and metrics

- ❑ Investigate what products are being purchased more often by repeat and/or loyalty customers to **better understand customer behavior and purchasing patterns**
- ❑ Investigate if customer behavior and purchasing patterns differ **between regions** (customer segmentation analysis) to implement region-specific marketing strategies

Follow up with marketing and inventory teams to align on next steps

- ❑ Collaborate with marketing and inventory groups to **develop measurement plans and benchmarks** to assess impact of recommendations
- ❑ Create dynamic Tableau dashboards to empower teams to self-serve insights

Thank you!



Appendix

Technical Process

Dataset stats:

- 108,127 transaction records
- Purchases from 87,625 customers across NA, EMEA, APAC, and LATAM
- Data ranges from 2019 to 2022

Data points involved:

- Orders: order ID, purchase date, product name, price, refund date (108,127 records)
- Customers: customer ID, marketing channel, region, loyalty program (87,625 records)

Technical process included:

- Cleaning and processing: Loading data in Excel to check, log, and address data quality issues like missing/nonsensical values, data types, and formatting errors, as well as create helper columns to indicate refund status
- Analysis and visualization:
 - Loading data into Tableau from Excel
 - Use calculated functions to calculate AOV, order count, growth rates (AOV, order count, revenue), refund rate, and repeat customer rate
 - Use filters to remove missing records
 - Apply color formatting and use table calculations to display conditional formatting and text labels on graphs.