



Analyzing Amazon Sales Data

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Project Overview

Analyzing Amazon sales data using Excel and Power BI to gain insights into customer behavior, product performance, and market trends, enabling data-driven decisions and business growth.

Datasets Overview

This dataset contains 6 key variables:

1. Product Category: Type of product sold
2. Product Description: Detailed product information
3. Price: Product price
4. Number of Reviews: Customer reviews count
5. Shipment Details: Shipping information
6. Order Date: Date of purchase

This dataset can be used to analyze sales trends, customer behavior, product performance, and more

Software Used

1. MS OFFICE / EXCEL :
VERSION 2021



2. POWER BI : JUNE 2023 Version
(You can also use latest version)



Problem Statement

CHARTS REQUIREMENT

- ✓ YTD Sales by Month (Line Chart): Visualize sales trends over time on a monthly basis to identify seasonal patterns and growth trends
- ✓ YTD Sales by Week (Column Chart): Display sales data on a weekly basis to pinpoint shorter-term fluctuations and performance insights.
- ✓ Sales by Product Category (Text/Heat Map): Utilize a text or heat map visualization to provide a high-level overview of sales across different product categories
- ✓ Top 5 Products by YTD Sales (Bar Chart): Highlight the top-performing products based on year-to-date sales to focus on key revenue generators.
- ✓ Top 5 Products by YTD Reviews (Bar Chart) : Identify the top-rated products by year-to-date reviews to understand customer preferences.

Problem Statement

KPI's REQUIREMENT

- ✓ YTD Sales: Monitor year-to-date sales to gauge the overall revenue performance over time.
- ✓ QTD Sales: Track quarterly sales figures to identify sales trends and fluctuations.
- ✓ YTD Products Sold: Analyse the total number of products sold throughout the year to understand product movement.
- ✓ YTD Reviews: Keep tabs on year-to-date product reviews to assess customer feedback and satisfaction.

Data Cleaning

fx = Table.TransformColumnTypes("#Use First Row as Headers",{{"Product Category", type text}, {"Product Description", type text}, {"Price(Dollar)", Int64.Type}, {"Number of reviews", Int64.Type}, {"Shipment", type text}, {"Order Date", type date})

	Product Category	Product Description	Price(Dollar)	Number of reviews	Shipment	Order Date
	<div><div>Valid 100%</div><div>Error 0%</div><div>Empty 0%</div></div> <div>1 distinct, 0 unique</div>	<div><div>Valid 100%</div><div>Error 0%</div><div>Empty 0%</div></div> <div>999 distinct, 998 unique</div>	<div><div>Valid 100%</div><div>Error 0%</div><div>Empty 0%</div></div> <div>213 distinct, 104 unique</div>	<div><div>Valid 100%</div><div>Error 0%</div><div>Empty 0%</div></div> <div>701 distinct, 533 unique</div>	<div><div>Valid 100%</div><div>Error 0%</div><div>Empty 0%</div></div> <div>2 distinct, 0 unique</div>	<div><div>Valid 100%</div><div>Error 0%</div><div>Empty 0%</div></div> <div>194 distinct, 31 unique</div>
1	Audio Video	Upgraded, Anker Soundcore Bluetooth Speaker with IPX5 Waterproof,...	27	82773	Ships to Bangladesh	1/3/2019
2	Audio Video	Twelve South AirFly Pro Bluetooth Wireless Audio Transmitter/ Receiv...	54	5121	Ships to Bangladesh	1/4/2019
3	Audio Video	iOttie Easy One Touch 5 Dashboard & Windshield Universal Car Mount...	24	126957	Ships to Bangladesh	1/4/2019
4	Audio Video	INIU Wireless Charger, 15W Fast Wireless Charging Station with Sleep-...	15	18837	Ships to Bangladesh	1/4/2019
5	Audio Video	JBL Flip 4 Waterproof Portable Bluetooth Speaker - Blue	78	13141	Ships to Bangladesh	1/5/2019
6	Audio Video	USB C Charger 20W, Anker 511 Charger (Nano), PIQ 3.0 Durable Com...	30	11748	Ships to Bangladesh	1/6/2019
7	Audio Video	Panasonic Portable AM / FM Radio, Battery Operated Analog Radio, A...	28	26724	Ships to Bangladesh	1/6/2019
8	Audio Video	Belkin MagSafe 3-in-1 Wireless Charging Stand - 2ND GEN w/ 33% Fast...	127	5762	Ships to Bangladesh	1/6/2019
9	Audio Video	Scosche MAGDMB MagicMount Magnetic Car Phone Holder Mount - 3...	12	33877	Ships to Bangladesh	1/6/2019
10	Audio Video	SAMSUNG 25W USB-C Super Fast Charging Wall Charger - Black (US Ve...	19	8765	Ships to Bangladesh	1/6/2019
11	Audio Video	Anker 315 Wireless Charger (Pad), 10W Max Fast Charging, Compatibl...	14	1661	Ships to Bangladesh	1/6/2019
12	Audio Video	Soundcore Anker Motion Boom Outdoor Speaker with Titanium Driver...	99	7304	Ships to Bangladesh	1/6/2019
13	Audio Video	Belkin MagSafe Vent Mount Pro - MagSafe Phone Mount For Car - Car ...	39	7409	Ships to Bangladesh	1/6/2019
14	Audio Video	Deluxe Products CD Player Portable with 60 Second Anti Skip, Stereo E...	22	4027	Ships to Bangladesh	1/6/2019
15	Audio Video	Amazon Basics 12W (5V, 2.4A) Car Charger with Lightning Cable (Coile...	10	10101	Ships to Bangladesh	1/7/2019
16	Audio Video	SAMSUNG 25W Wall Charger USB C Adapter, Super Fast Charging Bloc...	14	5953	Ships to Bangladesh	1/7/2019
17	Audio Video	USB Wall Charger, Cube Charger 2 Port Charging Box 4Pack 2.1A/5V H...	12	3113	Ships to Bangladesh	1/9/2019

Results and Visuals



Overall Dashboard

SALES ANALYSIS | AMAZON PRODUCT



\$2.18M

YTD Sales

\$811.09K

QTD Sales

27.75K

YTD Products Sold

19.42M

YTD Reviews

Filters

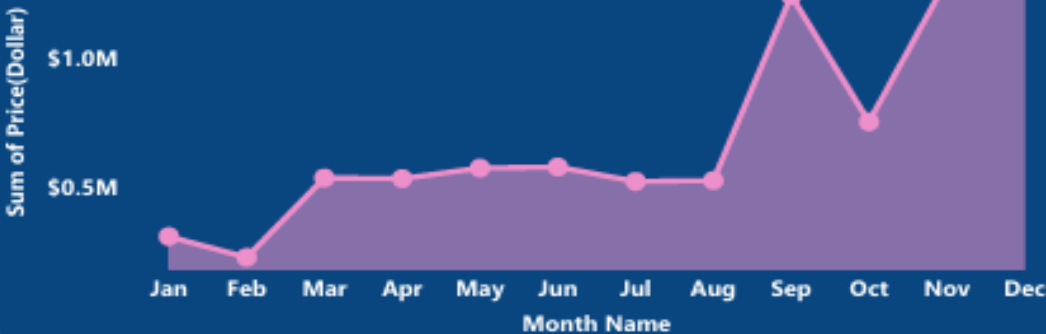
Product Catego...

All

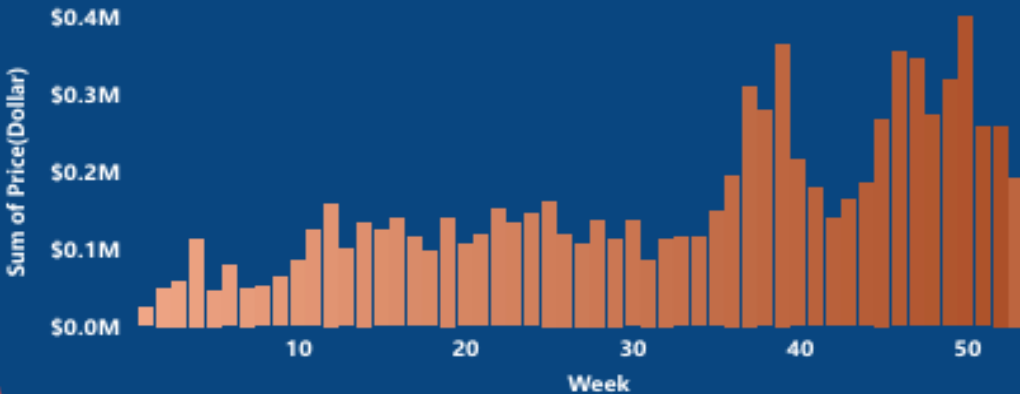
Qtr

All

Sales by Months



Sales by Week



Sales by Product Category

Product Category	YTD Sales	QTD Sales	% YTD Sales
Men Shoes	\$940,266	\$325,090	43.18%
Camera	\$492,521	\$188,381	22.62%
Men Clothes	\$357,644	\$136,700	16.42%
Car Accessories	\$237,290	\$91,359	10.90%
Toys	\$110,839	\$30,382	5.09%
Mobile & Accessories	\$39,178	\$39,178	1.80%
Total	\$2,177,738	\$811,090	100.00%

Top Product by YTD Sales

Nikon Wide...	\$34K
Atomos Nin...	\$28K
Solid Gear S...	\$27K
Canal Toys ...	\$22K
Vince Camu...	\$19K

Top Product by YTD Reviews

SanDisk 1...	0.40M
SanDisk 1...	0.34M
SanDisk 4...	0.23M
JETech Scr...	0.16M
WOLVERI...	0.14M

Conclusion

The Amazon Product Sales Analysis reveals a strong overall sales performance, with Year-To-Date (YTD) sales reaching \$2.18 million and Quarter-To-Date (QTD) sales at \$811.09K. A total of 27.75K products have been sold so far, with significant customer engagement reflected in 19.42 million reviews. The sales trend shows steady growth from the beginning of the year, with notable spikes in September and towards the end of the year, likely driven by festive seasons, sales events, and promotional offers. Among the product categories, Men Shoes emerged as the top contributor, accounting for 43.18% of total sales, followed by Cameras and Men's Clothing. In contrast, Mobile & Accessories contributed the least to the total sales. When analyzing top-performing products, the Nikon Wide Lens stands out with the highest individual sales, while SanDisk products dominate in terms of customer reviews, indicating strong brand loyalty in the tech accessories segment. Overall, the business is performing well, especially in fashion and tech-related categories, with a clear opportunity to further leverage seasonal trends and positive customer feedback to drive future growth.



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Dashboard Link :-

<https://app.powerbi.com/view?r=eyJrIjoiaWVhLTQ3ZDQtNDdlNi1hODRlLTJmYWNiNjRIOTdhOSJ9wODI2MTA5IiwidCI6IjFiOGQ5MjVhLTQ3ZDQtNDdlNi1hODRlLTJmYWNiNjRIOTdhOSJ9>