



**Project Description:** This analysis on Amazon data from India was done using MS Excel and involved the following skills:

- Data Cleaning
- Data Manipulation and calculations
- Data Transformation
- Creating Pivot Tables and Charts
- VLOOKUP and Relationships
- Insights Analysis

The following are the guide questions we want to answer for this project

A. Do we have a stable transaction trend?

B. What is the distribution of the order status?

C. Can we say something about the shipping fee? Do we think the shipping fee affects the number of orders?

## Raw Data

The images below show the raw data that I worked with. I has 28 columns and 172 rows. There are different highlights because I performed data cleaning and transformations. The cleaned data will be found in the next sheet called "Cleaned data" where all the pertinent information will only be included. The column descriptions are the following:

- A. order\_no/SKU: order ID
- B. order\_data: date and time the order was done
- C. order\_day: extracted day from order\_data
- D. order\_data1: month and day only
- E. order\_data2: only the day
- F. order\_data3: transformed month name to number
- G. order\_data4: extracted only the year of order data
- H. order\_date\_converted: date in number format
- I. order\_time: extracted only the time from order\_data
- J. order\_time\_converted: extracted only the time without the timezone specifications
- K. buyer: customer name info
- L. ship\_city: delivery destination (city)
- M. ship\_city\_proper: transformed ship\_city into proper capitalization
- N. ship\_state: delivery destination (state)
- O. ship\_state\_proper: transformed ship\_state into proper capitalization
- P. description: product description
- Q. description\_trimmed: trimmed spaces description
- R. quantity: product quantity
- S. item\_total: item total price (raw text)
- T. shipping\_fee: shipping fee (raw text)
- U. Extracted only number
- V. Extracted only number
- W. item\_total\_cost: transformed total\_cost to currency format
- X. shipping\_fee\_cost: transformed shipping\_fee to currency format
- Y. cod: delivery type
- Z. order\_status: delivered to buyer or returned to seller
- AA. cod\_trimmed
- AB. order\_status trimmed

Excel Project Amazon Data Analysis - Excel

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Conditional Formatting

Format as Table

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Cells

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Editing

A1

order\_no/SKU

	A	B	C	D	E	F	G	H	I	J
1	order_no/SKU	order_date	order_day	order_date	order_date	order_date	order_date4	order_date_converted	order_time	order_time_converted
2	405-9763961-5211537/SKU: 2X-3COF-KNJE	Sun, 18 Jul, 2021, 10:38 pm IST	Sun	18-Jul	18	7	2021	18/07/2021	10:38 pm IST	10:38 pm
3	404-3964908-7850720/SKU: DN-OWDX-VYOT	Tue, 19 Oct, 2021, 6:05 pm IST	Tue	19-Oct	19	10	2021	19/10/2021	6:05 pm IST	6:05 pm
4	171-8103182-4289117/SKU: DN-OWDX-VYOT	Sun, 28 Nov, 2021, 10:20 pm IST	Sun	28-Nov	28	11	2021	28/11/2021	10:20 pm IST	10:20 pm
5	405-3171677-9557154/SKU: AH-J3AO-R7DN	Wed, 28 Jul, 2021, 4:06 am IST	Wed	28-Jul	28	7	2021	28/07/2021	4:06 am IST	4:06 am
6	402-8910771-1215552/SKU: KL-7WAA-Z82I	Tue, 28 Sept, 2021, 2:50 pm IST	Tue	28-Sep	28	9	2021	28/09/2021	2:50 pm IST	2:50 pm
7	406-9292208-6725123/SKU: HH-FOWV-SYWI	Thu, 17 Jun, 2021, 9:12 pm IST	Thu	17-Jun	17	6	2021	17/06/2021	9:12 pm IST	9:12 pm
8	404-5794317-7737924/SKU: TQ-OE6K-9DIK	Thu, 12 Aug, 2021, 8:03 pm IST	Thu	12-Aug	12	8	2021	12/08/2021	8:03 pm IST	8:03 pm
9	405-8702211-4054722/SKU: S1-A92Q-JU3X	Wed, 29 Sept, 2021, 2:55 pm IST	Wed	29-Sep	29	9	2021	29/09/2021	2:55 pm IST	2:55 pm
10	171-1434812-8061163/SKU: 3F-4R9N-Z8NJ	Sat, 13 Nov, 2021, 7:37 pm IST	Sat	13-Nov	13	11	2021	13/11/2021	7:37 pm IST	7:37 pm
11	171-7954707-4463549/SKU: NU-CKZ5-4O49	Mon, 9 Aug, 2021, 4:47 pm IST	Mon	09-Aug	9	8	2021	09/08/2021	4:47 pm IST	4:47 pm
12	403-3146183-4920328/SKU: 2X-3COF-KNJE	Sat, 4 Sept, 2021, 11:53 am IST	Sat	04-Sep	4	9	2021	04/09/2021	11:53 am IST	11:53 am
13	404-4406917-9569950/SKU: DN-OWDX-VYOT	Tue, 16 Nov, 2021, 7:43 am IST	Tue	16-Nov	16	11	2021	16/11/2021	7:43 am IST	7:43 am
14	402-5321389-8685152/SKU: 94-TSV3-EIW6	Sat, 16 Oct, 2021, 10:11 am IST	Sat	16-Oct	16	10	2021	16/10/2021	10:11 am IST	10:11 am
15	403-4385783-1379508/SKU: FL-4CMG-CU48	Mon, 4 Oct, 2021, 10:05 am IST	Mon	04-Oct	4	10	2021	04/10/2021	10:05 am IST	10:05 am
16	408-9557300-6760347/SKU: YJ-5CCT-M3PP	Thu, 14 Oct, 2021, 11:14 pm IST	Thu	14-Oct	14	10	2021	14/10/2021	11:14 pm IST	11:14 pm
17	402-4179660-9937142/SKU: KL-7WAA-Z82I	Sun, 5 Sept, 2021, 9:10 am IST	Sun	05-Sep	5	9	2021	05/09/2021	9:10 am IST	9:10 am
18	405-6918787-5602743/SKU: TQ-OE6K-9DIK	Wed, 25 Aug, 2021, 7:48 am IST	Wed	25-Aug	25	8	2021	25/08/2021	7:48 am IST	7:48 am
19	406-1403658-9371527/SKU: PG-WS6J-89DG	Sat, 27 Nov, 2021, 12:46 pm IST	Sat	27-Nov	27	11	2021	27/11/2021	12:46 pm IST	12:46 pm
20	407-2082022-4357107/SKU: O9-OVS7-G9XK	Sun, 21 Nov, 2021, 1:08 pm IST	Sun	21-Nov	21	11	2021	21/11/2021	1:08 pm IST	1:08 pm
21	402-8678022-3083562/SKU: S1-A92Q-JU3X	Fri, 1 Oct, 2021, 11:34 pm IST	Fri	01-Oct	1	10	2021	01/10/2021	11:34 pm IST	11:34 pm
22	402-1146202-1933154/SKU: AY-Z7BT-BMVM	Fri, 10 Sept, 2021, 8:36 pm IST	Fri	10-Sep	10	9	2021	10/09/2021	8:36 pm IST	8:36 pm
23	402-6406639-0884351/SKU: DN-OWDX-VYOT	Wed, 10 Nov, 2021, 9:07 am IST	Wed	10-Nov	10	11	2021	10/11/2021	9:07 am IST	9:07 am
24	171-6105173-4790734/SKU: DN-OWDX-VYOT	Fri, 26 Nov, 2021, 7:22 pm IST	Fri	26-Nov	26	11	2021	26/11/2021	7:22 pm IST	7:22 pm
25	406-9975868-3000368/SKU: AY-Z7BT-BMVM	Wed, 20 Oct, 2021, 10:15 pm IST	Wed	20-Oct	20	10	2021	20/10/2021	10:15 pm IST	10:15 pm
26	403-7876698-8356365/SKU: 3O-GBSM-TYZE	Fri, 25 Jun, 2021, 7:48 am IST	Fri	25-Jun	25	6	2021	25/06/2021	7:48 am IST	7:48 am
27	402-2054361-4513137/SKU: TQ-OE6K-9DIK	Mon, 6 Sept, 2021, 12:46 pm IST	Mon	06-Sep	6	9	2021	06/09/2021	12:46 pm IST	12:46 pm
28	405-0695973-7365161/SKU: AH-J3AO-R7DN	Thu, 22 Jul, 2021, 9:32 am IST	Thu	22-Jul	22	7	2021	22/07/2021	9:32 am IST	9:32 am
29	404-9680499-3084319/SKU: DN-OWDX-VYOT	Fri, 29 Oct, 2021, 6:58 am IST	Fri	29-Oct	29	10	2021	29/10/2021	6:58 am IST	6:58 am
30	406-3518585-4093925/SKU: OM-RFE6-443C	Mon, 20 Sept, 2021, 6:41 pm IST	Mon	20-Sep	20	9	2021	20/09/2021	6:41 pm IST	6:41 pm
31	404-6883107-8347508/SKU: DN-OWDX-VYOT	Wed, 4 Aug, 2021, 8:16 pm IST	Wed	04-Aug	4	8	2021	04/08/2021	8:16 pm IST	8:16 pm
32	404-8244254-9274747/SKU: DN-OWDX-VYOT	Mon, 11 Oct, 2021, 9:30 am IST	Mon	11-Oct	11	10	2021	11/10/2021	9:30 am IST	9:30 am

Task1

Raw Data

Cleaned data

Reference Table

Step-by-step guide

1.) Transaction Trends

Ready

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A1

order\_no/SKU

	I	J	K	L	M	N	O	
	order_time	order_time_converted	buyer	ship_city	ship_city_proper	ship_state	ship_state_proper	description
1	10:38 pm IST	10:38 pm	Mr.	CHANDIGARH,	Chandigarh,	CHANDIGARH	Chandigarh	100% Leather Elephant Shaped Piggy Coin Bank   Block Printed West Bengal H
2	6:05 pm IST	6:05 pm	Minam	PASIGHAT,	Pasighat,	ARUNACHAL PRADESH	Arunachal Pradesh	Women's Set of 5 Multicolor Pure Leather Single Lipstick Cases with Mirror, H
3	10:20 pm IST	10:20 pm	yatipertin	PASIGHAT,	Pasighat,	ARUNACHAL PRADESH	Arunachal Pradesh	Women's Set of 5 Multicolor Pure Leather Single Lipstick Cases with Mirror, H
4	4:06 am IST	4:06 am	aciya	DEVARAKONDA,	Devarakonda,	TELANGANA	Telangana	Pure 100% Leather Block Print Rectangular Jewelry Box with Mirror   Button C
5	2:50 pm IST	2:50 pm	Susmita	MUMBAI,	Mumbai,	MAHARASHTRA	Maharashtra	Pure Leather Sling Bag with Multiple Pockets and Adjustable Strap   Shantiniki
6	9:12 pm IST	9:12 pm	Subinita	HOWRAH,	Howrah,	WEST BENGAL	West Bengal	Women's Trendy Pure Leather Clutch Purse   Leather Zipper Wallet
7	8:03 pm IST	8:03 pm	shailendra	ORAI,	Orai,	UTTAR PRADESH	Uttar Pradesh	Ultra Slim 100% Pure Leather Men's Wallet with Cash, Card and Coin Compart
8	2:55 pm IST	2:55 pm	Pratima	BAREILLY,	Bareilly,	UTTAR PRADESH	Uttar Pradesh	100% Pure Leather Shantiniketan Clutch Purse: Traditional Block Print Bi-color
9	7:37 pm IST	7:37 pm	Ipshita	BENGALURU,	Bengaluru,	KARNATAKA	Karnataka	Set of 2 Pure Leather Block Print Round Jewelry Boxes   Button Closure Multip
10	4:47 pm IST	4:47 pm	A.Jayaprada	Bhilai,	Bhilai,	CHHATTISGARH	Chhattisgarh	Pure Leather Sling Bag with Multiple Pockets and Adjustable Strap   Shantiniki
11	11:53 am IST	11:53 am	Sumeet	FARIDABAD,	Faridabad,	HARYANA	Haryana	100% Leather Elephant Shaped Piggy Coin Bank   Block Printed West Bengal H
12	7:43 am IST	7:43 am	Rolipar	AGARTALA,	Agartala,	TRIPURA	Tripura	Women's Set of 5 Multicolor Pure Leather Single Lipstick Cases with Mirror, H
13	10:11 am IST	10:11 am	Blessan	COONOOR,	Coonoor,	TAMIL NADU	Tamil Nadu	Bright and Colorful Shantiniketan Leather Elephant Piggy Coin Bank for Kids/A
14	10:05 am IST	10:05 am	Aditi	PUNE,	Pune,	MAHARASHTRA	Maharashtra	Pure Leather Sling Bag with Multiple Pockets and Adjustable Strap   Shantiniki
15	11:14 pm IST	11:14 pm	Satish	MANTHA,	Mantha,	MAHARASHTRA	Maharashtra	Pure Leather Camel Color Gent's Wallet with Coin Compartment and Card Hol
16	9:10 am IST	9:10 am	K	KOLKATA,	Kolkata,	WEST BENGAL	West Bengal	Pure Leather Sling Bag with Multiple Pockets and Adjustable Strap   Shantiniki
17	7:48 am IST	7:48 am	Mosin	MAHALINGPUR,	Mahalingpur,	KARNATAKA	Karnataka	Ultra Slim 100% Pure Leather Men's Wallet with Cash, Card and Coin Compart
18	12:46 pm IST	12:46 pm	shilpin	MUMBAI,	Mumbai,	MAHARASHTRA	Maharashtra	Bright and Colorful Shantiniketan Leather Elephant Piggy Coin Bank for Kids/A
19	1:08 pm IST	1:08 pm	prithi	HYDERABAD,	Hyderabad,	TELANGANA	Telangana	Set of 2 Pure Leather Block Print Round Jewelry Boxes   Button Closure Multip
20	11:34 pm IST	11:34 pm	Heena	MUMBAI,	Mumbai,	MAHARASHTRA	Maharashtra	100% Pure Leather Shantiniketan Clutch Purse: Traditional Block Print Bi-color
21	8:36 pm IST	8:36 pm	Hemal	MUMBAI 400 026,	Mumbai 400 026,	MAHARASHTRA	Maharashtra	Women's Pure Leather Jhallar Clutch Purse with Zipper Compartments   Floral
22	9:07 am IST	9:07 am	Neha	CUTTACK,	Cuttack,	ODISHA	Odisha	Women's Set of 5 Multicolor Pure Leather Single Lipstick Cases with Mirror, H
23	7:22 pm IST	7:22 pm	Geetika	GURUGRAM,	Gurugram,	HARYANA	Haryana	Women's Set of 5 Multicolor Pure Leather Single Lipstick Cases with Mirror, H
24	10:15 pm IST	10:15 pm	Hema	BENGALURU,	Bengaluru,	KARNATAKA	Karnataka	Women's Pure Leather Jhallar Clutch Purse with Zipper Compartments   Floral
25	7:48 am IST	7:48 am	Yash	MUMBAI,	Mumbai,	MAHARASHTRA	Maharashtra	100% Leather Ganesh Ji Piggy Coin Bank   Block Printed West Bengal Handicra
26	12:46 pm IST	12:46 pm	Ramesh	JALESWAR,	Jaleswar,	ODISHA	Odisha	Ultra Slim 100% Pure Leather Men's Wallet with Cash, Card and Coin Compart
27	9:32 am IST	9:32 am	Sailaja	VISAKHAPATNAM,	Visakhapatnam,	ANDHRA PRADESH	Andhra Pradesh	Pure 100% Leather Block Print Rectangular Jewelry Box with Mirror   Button C
28	6:58 am IST	6:58 am	Manisha	PUNEpunE,	Punepune,	MAHARASHTRA	Maharashtra	Women's Set of 5 Multicolor Pure Leather Single Lipstick Cases with Mirror, H
29	6:41 pm IST	6:41 pm	m	NEW DELHI,	New Delhi,	DELHI	Delhi	Set of 2 Pure Leather Block Print Round Jewelry Boxes   Button Closure Multip
30	8:16 pm IST	8:16 pm	chirag	RAIA,	Raia,	GOA	Goa	Women's Set of 5 Multicolor Pure Leather Single Lipstick Cases with Mirror, H
31	9:30 am IST	9:30 am	Subhendu	Bhubaneswar,	Bhubaneswar,	ODISHA	Odisha	Women's Set of 5 Multicolor Pure Leather Single Lipstick Cases with Mirror, H

Task1

Raw Data

Cleaned data

Reference Table

Step-by-step guide

1.) Transaction Trends

Ready

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A1

order\_no/SKU

	R	S	T	U	V	W	X	Y	Z	AA	AB
1	quantity	item_total	shipping_fee	Column2	Column3	item_total_c	shipping_fee	cod	order_status	cod_ti	order_status_trimmed
2	1	₹449.00		449.00		₹ 449.00			Delivered to buyer		Delivered to buyer
3	1	₹449.00	₹60.18	449.00	60.18	₹ 449.00	₹ 60.18		Delivered to buyer		Delivered to buyer
4	1	₹449.00	₹60.18	449.00	60.18	₹ 449.00	₹ 60.18		Delivered to buyer		Delivered to buyer
5	1							Cash On Delivery	Delivered to buyer	Cash On	Delivered to buyer
6	1	₹1,099.00	₹84.96	1,099.00	84.96	₹ 1,099.00	₹ 84.96		Delivered to buyer		Delivered to buyer
7	1	₹200.00		200.00		₹ 200.00			Delivered to buyer		Delivered to buyer
8	1							Cash On Delivery	Returned to seller	Cash On	Returned to seller
9	1	₹399.00	₹84.96	399.00	84.96	₹ 399.00	₹ 84.96	Cash On Delivery	Delivered to buyer	Cash On	Delivered to buyer
10	1	₹399.00	₹84.96	399.00	84.96	₹ 399.00	₹ 84.96		Delivered to buyer		Delivered to buyer
11	1	₹1,099.00		1,099.00		₹ 1,099.00			Delivered to buyer		Delivered to buyer
12	1	₹449.00	₹114.46	449.00	114.46	₹ 449.00	₹ 114.46		Delivered to buyer		Delivered to buyer
13	1	₹449.00	₹60.18	449.00	60.18	₹ 449.00	₹ 60.18		Delivered to buyer		Delivered to buyer
14	1	₹449.00	₹84.96	449.00	84.96	₹ 449.00	₹ 84.96	Cash On Delivery	Delivered to buyer	Cash On	Delivered to buyer
15	1	₹1,099.00	₹84.96	1,099.00	84.96	₹ 1,099.00	₹ 84.96		Delivered to buyer		Delivered to buyer
16	1	₹84.96		84.96		₹ 84.96		Cash On Delivery	Returned to seller	Cash On	Returned to seller
17	1	₹1,099.00	₹62.54	1,099.00	62.54	₹ 1,099.00	₹ 62.54		Delivered to buyer		Delivered to buyer
18	1	₹649.00	₹81.42	649.00	81.42	₹ 649.00	₹ 81.42	Cash On Delivery	Delivered to buyer	Cash On	Delivered to buyer
19	1	₹449.00	₹84.96	449.00	84.96	₹ 449.00	₹ 84.96		Delivered to buyer		Delivered to buyer
20	1	₹399.00	₹84.96	399.00	84.96	₹ 399.00	₹ 84.96		Delivered to buyer		Delivered to buyer
21	1	₹399.00	₹84.96	399.00	84.96	₹ 399.00	₹ 84.96	Cash On Delivery	Delivered to buyer	Cash On	Delivered to buyer
22	1	₹399.00	₹84.96	399.00	84.96	₹ 399.00	₹ 84.96		Delivered to buyer		Delivered to buyer
23	1	₹449.00	₹60.18	449.00	60.18	₹ 449.00	₹ 60.18		Delivered to buyer		Delivered to buyer
24	1	₹84.96		84.96		₹ 84.96			Returned to seller		Returned to seller
25	1	₹399.00	₹84.96	399.00	84.96	₹ 399.00	₹ 84.96		Delivered to buyer		Delivered to buyer
26	1							Cash On Delivery	Returned to seller	Cash On	Returned to seller
27	1	₹649.00	₹60.18	649.00	60.18	₹ 649.00	₹ 60.18	Cash On Delivery	Delivered to buyer	Cash On	Delivered to buyer
28	1	₹250.00		250.00		₹ 250.00			Delivered to buyer		Delivered to buyer
29	1	₹449.00	₹84.96	449.00	84.96	₹ 449.00	₹ 84.96	Cash On Delivery	Delivered to buyer	Cash On	Delivered to buyer
30	1	₹399.00	₹84.96	399.00	84.96	₹ 399.00	₹ 84.96	Cash On Delivery	Delivered to buyer	Cash On	Delivered to buyer
31	1	₹449.00		449.00		₹ 449.00			Delivered to buyer		Delivered to buyer
32	1	₹449.00	₹60.18	449.00	60.18	₹ 449.00	₹ 60.18		Delivered to buyer		Delivered to buyer

Task1

Raw Data

Cleaned data

Reference Table

Step-by-step guide

1.) Transaction Trends ...

Ready

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Below is the cleaned data that only included the green-highlighted columns from the previous sheet.

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Editing

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Delivered to buyer

order_id	order_date	order_time	rounded_at	buyer	ship_city	ship_state	region	description	quantity	item_total	shipping_fee	mode_of_payment	order_status
127	Sat	04/12/2021	2:28 PM	2:00 PM	Anastasia Vishakhapatnam,	Andhra Pradesh	Southern	Bright & Colorful Shantiniketan Clutch Purse- Traditional Block Print Bi-color Women's Wallets with Multiple Pockets and Zipper Compartments 1(pcs) (O	1	₹ 398.00	₹ 84.96		Delivered to buy
128	Wed	29/12/2021	1:03 PM	1:00 AM	Krishnakshi Kolencherry,	Karnataka	Northern	Bright & Colorful Shantiniketan Leather Elephant Piggy Coin Bank for Kids/Adults   Light-Weight Handcrafted Elephant Shaped Money Bank (Black, Small	1	₹ 449.00	₹ 84.96		Delivered to buy
129	Tue	16/12/2021	14:06 PM	1:00 PM	Aditi New Delhi,	Northern	Brnght & Colorful Shantiniketan Leather Elephant Piggy Coin Bank for Kids/Adults   Light-Weight Handcrafted Elephant Shaped Money Bank (Green, Large	1	₹ 449.00	₹ 84.96		Delivered to buy	
130	Mon	06/12/2021	10:25 PM	10:00 PM	J Bengaluru,	Karnataka	Southern	Stunning Women's Finished Leather Handbag  Sleek and Elegant Party Bag with Glamorous Steel Rings and Multiple Pockets (Pink)	1	₹ 898.00	₹ 114.46		Delivered to buy
131	Tue	20/12/2021	14:30 AM	11:00 AM	amha Salem,	Tamil Nadu	Southern	Set of 3 Pure Leather Block Print Round Jewelry Boxes   Button Closure Multiple Utility Case (Shantiniketan Handicrafts) (Yellow)	1	₹ 475.00	₹ 84.96		Delivered to buy
132	Sat	04/12/2021	10:32 PM	10:00 PM	p chandima Bengaluru,	Karnataka	Southern	Bright & Colorful Shantiniketan Leather Piggy Bank for Kids/Adults   Light-Weight Handcrafted Owl Shaped Coin Bank (Red)	1	₹ 549.00	₹ 84.96		Delivered to buy
133	Wed	09/12/2021	12:50 AM	12:00 AM	Amal Geelika Gurugram,	Haryana	Northern	Women's Set of 5 Multicolor Pure Leather Single Lipstick Cases with Mirror, Handy and Compact Handcrafted Shantiniketan Block Printed Jewelry Boxes	1	₹ 449.00	₹ 84.96		Delivered to buy
134	Wed	09/12/2021	12:58 PM	12:00 PM	vijayalakshmi Chennai,	Tamil Nadu	Southern	Women's Pure Leather Jhallar Clutch Purse with Zipper Compartments   Floral Block Print Ladies Wallet (Red, 1pc)	1	₹ 399.00	₹ 84.96		Delivered to buy
135	Mon	14/02/2022	7:12 PM	7:00 PM	Tapen Ghaziabad,	Uttar Pradesh	Northern	Colorful and Bright Peacock Shaped Piggy Coin Bank   Block Printed West Bengal's 100% Leather Handicrafts (Shantiniketan Art)   Money Bank for Kids	1	₹ 449.00	₹ 84.96		Delivered to buy
136	Tue	29/12/2021	13:20 AM	11:00 AM	Despalai Jodhpur,	Rajasthan	Northern	Women's Set of 5 Multicolor Pure Leather Single Lipstick Cases with Mirror, Handy and Compact Handcrafted Shantiniketan Block Printed Jewelry Boxes	1	₹ 449.00	₹ 84.96		Returned to sell
137	Fri	10/12/2021	5:53 PM	5:00 PM	Shahin Mumbai,	Maharashtra	Western	Women's Set of 5 Multicolor Pure Leather Single Lipstick Cases with Mirror, Handy and Compact Handcrafted Shantiniketan Block Printed Jewelry Boxes	1	₹ 449.00	₹ 84.96	Cash On Delivery	Delivered to buy
138	Sun	02/12/2021	11:38 AM	11:00 AM	Arsl Pune,	Maharashtra	Southern	Bright & Colorful Shantiniketan Leather Elephant Piggy Coin Bank for Kids/Adults   Light-Weight Handcrafted Elephant Shaped Money Bank (Black, Large	1	₹ 449.00	₹ 84.96		Delivered to buy
139	Sun	02/12/2021	5:51 PM	5:00 PM	RCHIT Secunderabad,	Telangana	Southern	Bright & Colorful Shantiniketan Leather Elephant Piggy Coin Bank for Kids/Adults   Light-Weight Handcrafted Elephant Shaped Money Bank (Black, Large	1	₹ 449.00	₹ 84.96		Delivered to buy
140	Tue	30/12/2021	7:49 PM	7:00 PM	Kumar Bengaluru,	Karnataka	Southern	Colorful and Bright Peacock Shaped Piggy Coin Bank   Block Printed West Bengal's 100% Leather Handicrafts (Shantiniketan Art)   Money Bank for Kids	1	₹ 449.00	₹ 84.96		Delivered to buy
141	Sat	04/12/2021	12:43 PM	12:00 AM	Garg Kolkata,	West Bengal	Eastern	Bright & Colorful Shantiniketan Leather Piggy Bank for Kids/Adults   Light-Weight Handcrafted Owl Shaped Coin Bank (Red)	1	₹ 549.00	₹ 84.96		Delivered to buy
142	Fri	31/12/2021	9:55 PM	9:00 PM	NANDINI Kolkata,	West Bengal	Eastern	Bright & Colorful Shantiniketan Clutch Purse- Traditional Block Print Bi-color Women's Wallets with Multiple Pockets and Zipper Compartments 1(pcs) (O	1	₹ 398.00	₹ 84.96		Delivered to buy
143	Sun	7:10 PM	7:10 PM	PM	Vedodra Vadodra,	Gujarat	Western	Set of 3 Pure Leather Block Print Round Jewelry Boxes   Button Closure Multiple Utility Case (Shantiniketan Handicrafts) (Green)	1	₹ 449.00	₹ 84.96		Delivered to buy
144	Wed	29/12/2021	8:44 AM	8:00 PM	RAJAT Punjab,	Chandigarh	Northern	Women's Set of 5 Multicolor Pure Leather Single Lipstick Cases with Mirror, Handy and Compact Handcrafted Shantiniketan Block Printed Jewelry Boxes	1	₹ 449.00	₹ 84.96	Cash On Delivery	Delivered to buy
145	Sun	16/12/2021	5:23 PM	5:00 PM	nia Kolkata,	West Bengal	Eastern	Set of 3 Pure Leather Block Print Round Jewelry Boxes   Button Closure Multiple Utility Case (Shantiniketan Handicrafts) (Yellow)	1	₹ 475.00	₹ 84.96		Delivered to buy
146	Wed	23/12/2021	9:28 PM	9:00 PM	Saba Anrohra,	Uttar Pradesh	Northern	Bright and Colorful Shantiniketan Leather Elephant Piggy Coin Bank for Kids/Adults   Light-Weight Handcrafted Elephant Shaped Money Bank (Black, Large	1	₹ 449.00	₹ 84.96	Cash On Delivery	Delivered to buy
147	Wed	09/12/2021	7:17 PM	7:00 PM	Poonam Mumbai,	Maharashtra	Northern	Bright and Colorful Shantiniketan Leather Elephant Piggy Coin Bank for Kids/Adults   Light-Weight Handcrafted Elephant Shaped Money Bank (Red, Small)	1	₹ 349.00	₹ 84.96		Delivered to buy
148	Wed	23/12/2021	7:36 PM	7:00 PM	VAISHALI Uttar Pradesh,	Uttar Pradesh	Northern	Bright and Colorful Shantiniketan Leather Elephant Piggy Coin Bank for Kids/Adults   Light-Weight Handcrafted Elephant Shaped Money Bank (Blue, Large)	1	₹ 449.00	₹ 84.96		Delivered to buy
149	Sun	20/12/2021	8:29 PM	8:00 PM	Fanuk Burdwan,	West Bengal	Eastern	Set of 3 Pure Leather Block Print Round Jewelry Boxes   Button Closure Multiple Utility Case (Shantiniketan Handicrafts) (Yellow)	1	₹ 475.00	₹ 60.18		Delivered to buy
150	Sun	09/12/2021	12:28 AM	12:00 AM	pavitra Chennai,	Tamil Nadu	Southern	100% Pure Leather Shantiniketan Clutch Purse- Traditional Block Print Bi-color Women's Wallets with Multiple Pockets and Zipper Compartments 1(pcs) (B	1	₹ 398.00	₹ 84.96		Delivered to buy
151	Sun	09/12/2021	11:29 AM	11:00 AM	Mariata Kodambakkam, Chen	Tamil Nadu	Southern	Women's Set of 5 Multicolor Pure Leather Single Lipstick Cases with Mirror, Handy and Compact Handcrafted Shantiniketan Block Printed Jewelry Boxes	1	₹ 449.00	₹ 84.96	Cash On Delivery	Delivered to buy
152	Sun	19/12/2021	4:10 PM	7:00 PM	DIVYA Bengaluru,	Karnataka	Southern	Women's Set of 5 Multicolor Pure Leather Single Lipstick Cases with Mirror, Handy and Compact Handcrafted Shantiniketan Block Printed Jewelry Boxes	1	₹ 449.00	₹ 84.96		Returned to sell
153	Wed	23/12/2021	7:52 PM	7:00 PM	Shruhi Allahabad,	Uttar Pradesh	Northern	Set of 3 Pure Leather Block Print Round Jewelry Boxes   Button Closure Multiple Utility Case (Shantiniketan Handicrafts) (Green)	1	₹ 349.00	₹ 60.18		Delivered to buy
154	Wed	19/12/2021	11:00 AM	11:00 AM	venna Bengaluru,	Karnataka	Southern	Bright & Colorful Shantiniketan Leather Piggy Bank for Kids/Adults   Light-Weight Handcrafted Owl Shaped Coin Bank (Black)	1	₹ 549.00	₹ 84.96		Delivered to buy
155	Tue	01/02/2022	6:45 AM	8:00 AM	Gita Chennai,	Tamil Nadu	Southern	Bright and Colorful Shantiniketan Leather Elephant Piggy Coin Bank for Kids/Adults   Light-Weight Handcrafted Elephant Shaped Money Bank (Black, Large	1	₹ 449.00	₹ 84.96		Delivered to buy
156	Sun	09/12/2021	9:33 PM	9:00 PM	srisoma New Delhi,	Delhi	Northern	100% Leather Cat Shaped Piggy Coin Bank   Block Printed West Bengal Handicrafts (Shantiniketan Art)   Money Bank for Kids   Children's Gift Ideas (Blu	1	₹ 449.00	₹ 84.96		Delivered to buy
157	Sun	19/12/2021	7:08 PM	7:00 PM	Ashna Chandigarh,	Chandigarh	Northern	Women's Set of 5 Multicolor Pure Leather Single Lipstick Cases with Mirror, Handy and Compact Handcrafted Shantiniketan Block Printed Jewelry Boxes	1	₹ 449.00	₹ 84.96		Delivered to buy
158	Sat	02/12/2022	3:01 PM	11:00 AM	Shahin Allahabad,	Uttar Pradesh	Northern	Set of 3 Pure Leather Block Print Round Jewelry Boxes   Button Closure Multiple Utility Case (Shantiniketan Handicrafts) (Green)	1	₹ 475.00	₹ 84.96		Delivered to buy
159	Wed	09/12/2021	15:44 PM	1:00 PM	Aarti Bilimora,	Gujarat	Western	100% Pure Leather Shantiniketan Clutch Purse- Traditional Block Print Bi-color Women's Wallets with Multiple Pockets and Zipper Compartments 1(pcs) (G	1	₹ 398.00	₹ 84.96	Cash On Delivery	Delivered to buy
160	Tue	17/12/2021	9:14 PM	9:00 PM	Captain Kolkata,	West Bengal	Eastern	Bright and Colorful Horse Shaped Piggy Coin Bank   Block Printed West Bengal's 100% Leather Handicrafts (Shantiniketan Art)   Money Bank for Kids   Ch	1	₹ 449.00	₹ 47.20	Cash On Delivery	Delivered to buy
161	Sun	30/12/2021	1:37 PM	1:00 PM	Gita Chennai,	Tamil Nadu	Southern	Bright and Colorful Shantiniketan Leather Elephant Piggy Coin Bank for Kids/Adults   Light-Weight Handcrafted Elephant Shaped Money Bank (Black, Large	1	₹ 449.00	₹ 84.96	Cash On Delivery	Returned to sell
162	Fri	10/12/2021	4:56 PM	8:00 PM	Daireen Bengaluru,	Karnataka	Southern	Women's Set of 5 Multicolor Pure Leather Single Lipstick Cases with Mirror, Handy and Compact Handcrafted Shantiniketan Block Printed Jewelry Boxes	1	₹ 449.00	₹ 84.96		Delivered to buy
163	Wed	01/12/2021	5:43 AM	11:00 AM	Shahin Mumbai,	Uttar Pradesh	Northern	Women's Set of 5 Multicolor Pure Leather Single Lipstick Cases with Mirror, Handy and Compact Handcrafted Shantiniketan Block Printed Jewelry Boxes	1	₹ 449.00	₹ 84.96		Delivered to buy
164	Tue	17/12/2021	9:47 AM	8:00 PM	Shikha Navi Mumbai,	Maharashtra	Western	Bright and Colorful Shantiniketan Leather Elephant Piggy Coin Bank for Kids/Adults   Light-Weight Handcrafted Elephant Shaped Money Bank (Orange, Larg	1	₹ 449.00	₹ 84.96		Delivered to buy
165	Tue	20/12/2021	10:57 AM	10:00 AM	Vadim New Delhi,	Delhi	Northern	100% Leather Elephant Shaped Piggy Coin Bank   Block Printed West Bengal Handicrafts (Shantiniketan Art)   Money Bank for Kids   Children's Gift Ideas	1	₹ 449.00	₹ 84.96	Cash On Delivery	Delivered to buy
166	Sat	04/12/2021	10:28 PM	10:00 PM	Swathi Vishakhapatnam,	Andhra Pradesh	Southern	Set of 2 Pure Leather Block Print Round Jewelry Boxes   Button Closure Multiple Utility Case (Shantiniketan Handicrafts) (Yellow)	1	₹ 398.00	₹ 84.96		Delivered to buy
167	Sat	29/12/2021	4:03 PM	4:00 PM	User Solan,	Himachal Prade	Northern	100% Pure Leather Shantiniketan Clutch Purse- Traditional Block Print Bi-color Women's Wallets with Multiple Pockets and Zipper Compartments 1(pcs) (G	1	₹ 398.00	₹ 84.96		Delivered to buy
168	Wed	19/12/2021	11:30 AM	11:00 AM	Shahin Mumbai,	Maharashtra	Western	Women's Set of 5 Multicolor Pure Leather Single Lipstick Cases with Mirror, Handy and Compact Handcrafted Shantiniketan Block Printed Jewelry Boxes	1	₹ 449.00	₹ 84.96	Cash On Delivery	Delivered to buy
169	Wed	09/12/2021	12:30 PM	12:00 PM	Sharmista Dehradun,	Uttarakhand	Northern	Traditional Block-Printed Women's 100% Pure Leather Shoulder Bag Double Handle Red Handbag   Multi-pocket Shantiniketan Leather Bag for Women	1	₹ 1299.00	₹ 114.46		Delivered to buy
170	Tue	09/12/2021	5:55 PM	6:00 PM	shashank Durg,	Chhattisgarh	Central	Traditional Block-Printed Women's 100% Pure Leather Shoulder Bag Double Handle Red Handbag   Multi-pocket Shantiniketan Leather Bag for Women	1	₹ 1299.00	₹ 105.02		Delivered to buy
171	Wed	23/12/2021	12:43 AM	12:00 AM	Jayeta Kolkata,	West Bengal	Eastern	Slushish and Sleek Multiple Pockets 100 Percent Leather Shoulder Bag Contemporary Indian Leather Handicrafts for Women (Yellow) (EL335)	1	₹ 1499.00	₹ 80.24	Cash On Delivery	Delivered to buy
172	Sun	29/12/2021	6:21 PM	6:00 PM	Varun Mumbai,	Maharashtra	Western	100% Leather Elephant Shaped Piggy Coin Bank   Block Printed West Bengal Handicrafts (Shantiniketan Art)   Money Bank for Kids   Children's Gift Ideas	1	₹ 449.00	₹ 84.96		Delivered to buy

Task1Raw DataCleaned dataReference TableStep-by-step guide1) Transaction Trends

Ready

45%

## Reference Table

These tables will help us in looking up information about certain data we have.

Excel Project\_Amazon Data Analysis - Excel

File Home Insert Page Layout Formulas Data Review View Help Tell me what you want to do

Clipboard Font Alignment Number Styles Cells Editing

Calibri 11 A A Wrap Text General

B I U Merge & Center

Conditional Formatting Format as Table Cell Styles

Insert Delete Format

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O49

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	Order ID	Processed By			State	Rank	Area (km2)	Region							
2	171	A			Rajasthan	342239	1 (S2)	Northern							
5	174	D			Uttar Pradesh	240928	4 (S4)	Northern							
18	408	Q			Ladakh	59146	17 (UT1)	Northern							
19	409	R			Himachal Pradesh	55673	18 (S17)	Northern							
20	410	S			Uttarakhand	53483	19 (S18)	Northern							
21	411	T			Punjab	50362	20 (S19)	Northern							
22	412	U			Haryana	44212	21 (S20)	Northern							
23	413	V			Jammu and Kashmir	42241	22 (UT2)	Northern							
33					Delhi	1483	32 (UT4)	Northern							
36					Chandigarh	114	35 (UT7)	Northern							

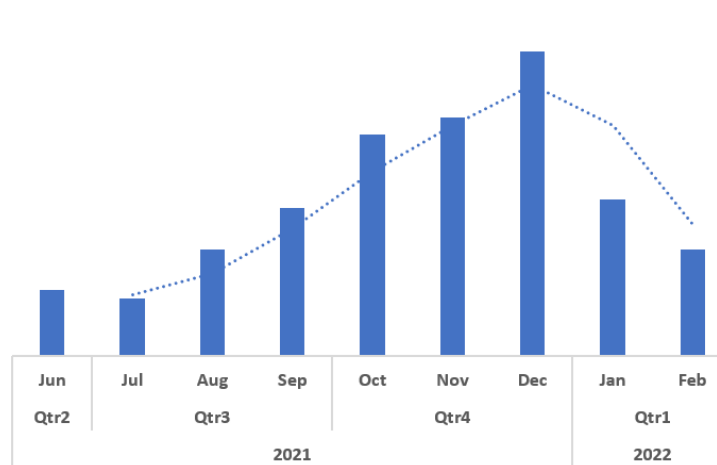
Task1 Raw Data Cleaned data Reference Table Step-by-step guide 1.) Transaction Trends ...

## ANALYSIS PROPER

### Transaction Trends

Count of order_no/SKU	
2021	139
Qtr2	8
Jun	8
Qtr3	38
Jul	7
Aug	13
Sep	18
Qtr4	93
Oct	27
Nov	29
Dec	37
2022	32
Qtr1	32
Jan	19
Feb	13
Grand Total	171

Order Count vs Month (temporal)



#### Title

Order count by month, Jun 2021-Feb 2022 (temporal)

#### Description

Here is a simple overview of order count by month. We will analyse further in the following tables and charts.

#### Insight

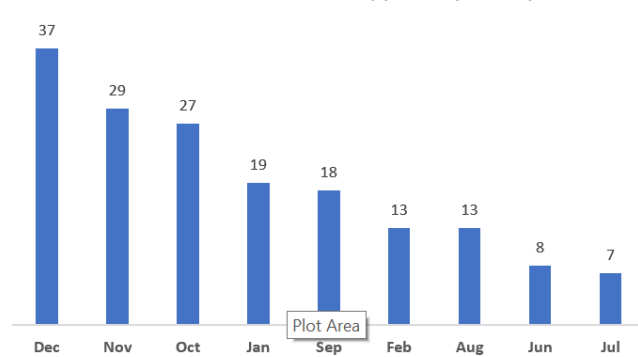
There is an obvious imbalance of order count among months in the given period.

#### Assumption

There are certain months and quarters that reflect the greatest number of orders.

Count of order_no/SKU	
Dec	37
Nov	29
Oct	27
Jan	19
Sep	18
Feb	13
Aug	13
Jun	8
Jul	7
Grand Total	171

Order Count vs Month (quantity focus)



#### Title

Order count by month, Jun 2021-Feb 2022 (quantitative)

#### Description

For the entire scope of the data, December was the month that got the most orders with 37 counts. July, on the other hand, had the least with just 7 orders. This was counted irrespective of quarters and years.

#### Insight

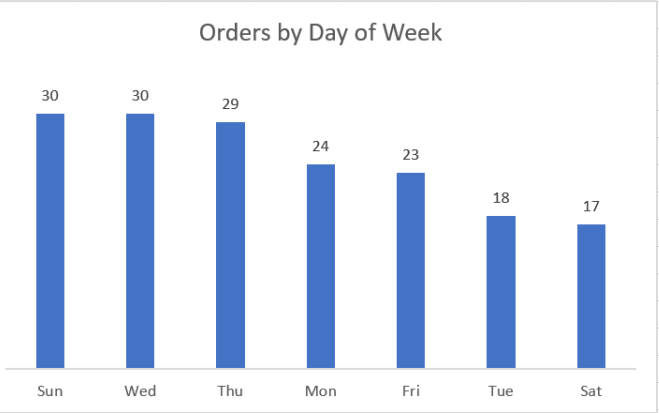
Seeing the top 3 months in terms of order counts, they also fall down in Q4 of 2021 as reflected in the above chart.

#### Assumption

Q4 of the year tends to garner the most orders. This could reflect the purpose of buying items by Indians. It is wrong to assume Christmas season gift buying because only a minority of Indians celebrate the said holiday. We will see what purpose/s they have based on the items they bought.



Row Label	Count of order_no/SKU
Sun	30
Wed	30
Thu	29
Mon	24
Fri	23
Tue	18
Sat	17
Grand Total	171



**Title**

Order count by Day of Week

**Description**

Sundays and Wednesdays have the most accumulated orders among other days of the week with 30 orders each for the entire period

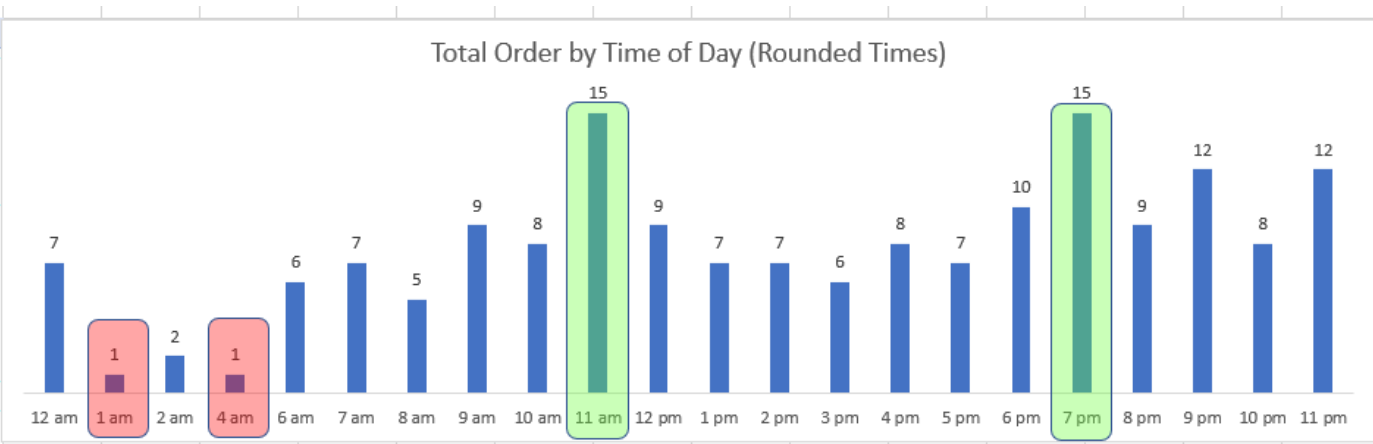
**Insight**

Sundays and Wednesdays are the most active days that customers check-out with their orders.

**Assumption/Recommendation**

The company might want to create reminders through app or email that will prompt pitches to customers about good deals and/or checking out their 'added to cart' items on the lesser active days (e.g., Saturdays and Tuesdays).

Count of order_no/SKU	
12 am	7
1 am	1
2 am	2
4 am	1
6 am	6
7 am	7
8 am	5
9 am	9
10 am	8
11 am	15
12 pm	9
1 pm	7
2 pm	7
3 pm	6
4 pm	8
5 pm	7
6 pm	10
7 pm	15
8 pm	9
9 pm	12
10 pm	8
11 pm	12
Grand Total	171



#### Title

Order Count by Time of Day

#### Description

The chart above shows accumulated order count by time of day rounded down to the nearest hour. Times at 11am and 7pm have the most number of orders with 15 counts. While 1am and 4am have the least with only 1 count.

#### Insight/Assumption

Customers usually purchase at around lunch and dinner-times. This may also be times that they are in the company of others and may have good mood. Low orders on 1am and 4 am may simply mean that customers are asleep and hence can't buy on those times.

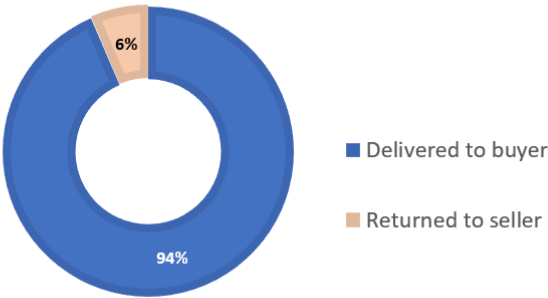
#### Recommendation

The company might want to create better deals to ride the wave of high customer count that are online and checking-out their orders. To address the low order timestamps, we suggest advertisements similar to midnight shopping shows but mainly on platforms where people still frequent at night. I suggest the company have ads posted up on Facebook and Youtube to subconsciously remind customers and potential customers to

# Order Status Trends

Count of order_	
Delivered to buyer	160
Returned to seller	11
Grand Total	171

ORDER STATUS COUNT BY TYPE



**Title**

Order Status Count by Type

**Description**

94% or 160 out of 171 orders have concluded where the package have been delivered to the buyer. While only 6% or 11 orders have been returned to the seller.

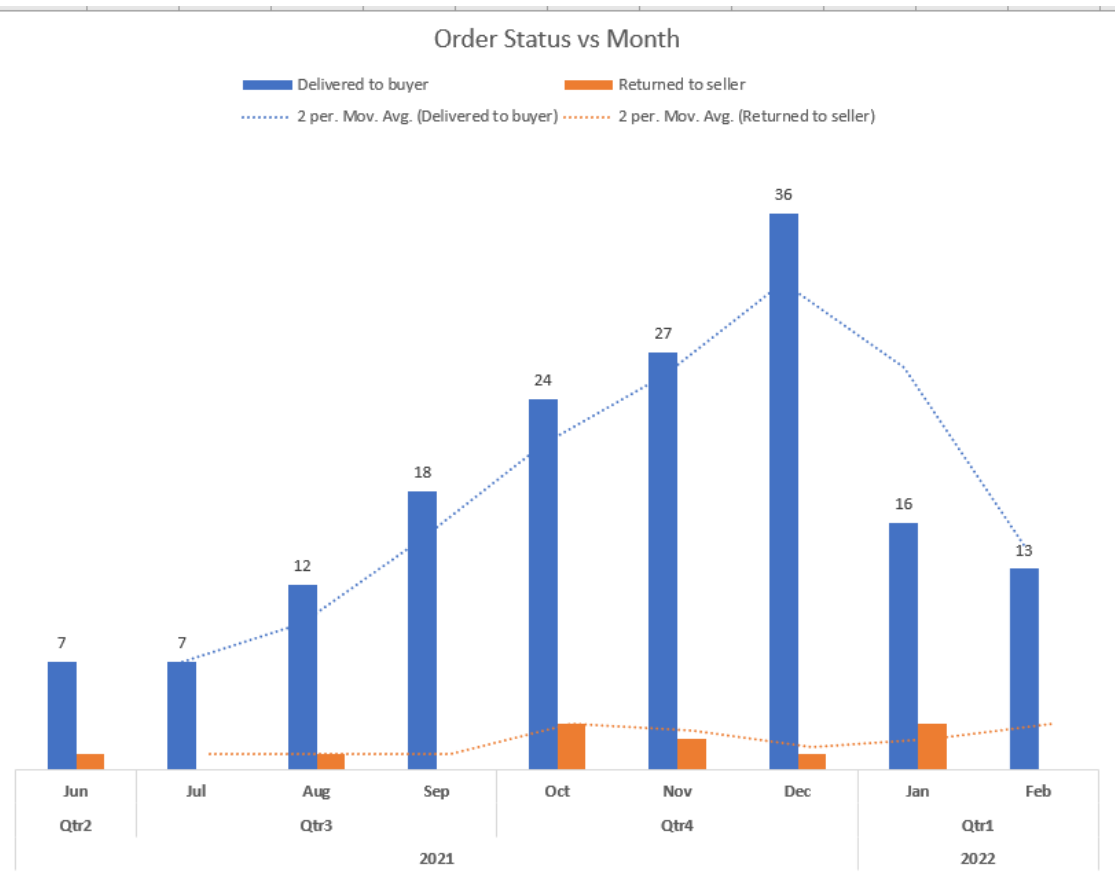
**Insight**

We can say that the delivery system has great efficiency at 94%. Still, we want to understand why certain orders have been returned to the seller and optimize our delivery services.

**Assumption**

We will understand this trend by looking into other elements involving returned orders.

Count of order_status			
	Delivered to buyer	Returned to seller	Grand Total
2021	131	8	139
Qtr2	7	1	8
Jun	7	1	8
Qtr3	37	1	38
Jul	7		7
Aug	12	1	13
Sep	18		18
Qtr4	87	6	93
Oct	24	3	27
Nov	27	2	29
Dec	36	1	37
2022	29	3	32
Qtr1	29	3	32
Jan	16	3	19
Feb	13		13
Grand Total	160	11	171



### Title

Order Status by Month

### Description

Throughout all months, a huge majority of orders have been delivered to the buyer as signified by the blue line running over the orange line signifying the trend for orders being returned to the seller.

### Insight and Assumption

Again, we see that the system is efficient in delivering orders. But we want to improve this as well to possibly 100% delivered to buyer status. Maybe it is because of the product type. We shall see this in the next chart.

Insight: After manual comparison, there is no unique item that was returned to the seller that is not delivered to the buyer. We shall see if another variable, the region, plays a role in returning orders to sellers.

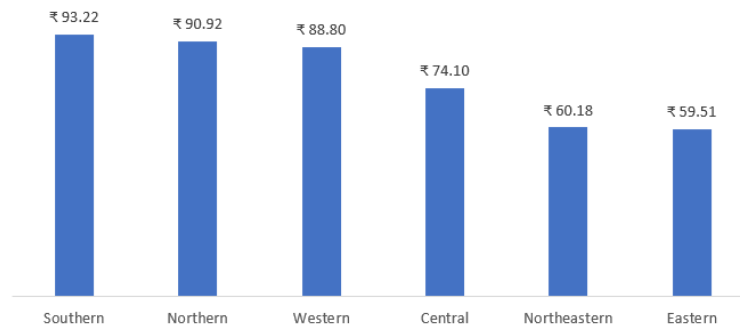
Count of region		
<b>Delivered to buyer</b>	<b>160</b>	<p><b>Insight:</b> Most of the orders returned to the seller were from the Northern region with 4 counts, followed by Southern region with 3 counts. This variable seems to provide enough evidence to explain the trend.</p> <p><b>Assumption:</b> Both South and North regions may be far and many factors could have played a role in the customer choice to return the order to the seller. -increased delivery time -increased wear and tear to the packages due to prolonged shipping -exceeding expected date of arrival hence irritating the customer.</p> <p><b>Recommendation:</b> If my assumptions are correct, these issues can be addressed by one major action: to create branches of the storehouses near the South and North regions so that: -there is decreased delivery time -less damage to the packages due to less shipping time -orders arrive closer to the expected date of delivery.</p> <p>Doing so may not only increase delivery rate and that we expect the order status of 'delivered to buyer' be higher than 94%, but we can also lower the shipping fee in exchange to enticing more customers to avail our delivery services. The balance between these two variables shall be seen if ever the recommendations above have been implemented.</p>
Central	7	
Eastern	22	
Northeastern	6	
Northern	36	
Southern	51	
Western	38	
<b>Returned to seller</b>	<b>11</b>	
Eastern	1	
Northeastern	1	
Northern	4	
Southern	3	
Western	2	
<b>Grand Total</b>	<b>171</b>	

## Shipping Fee Analysis

### Average of shipping\_fee

Southern	₹ 93.22
Northern	₹ 90.92
Western	₹ 88.80
Central	₹ 74.10
Northeastern	₹ 60.18
Eastern	₹ 59.51
<b>Grand Total</b>	<b>₹ 84.75</b>

AVG Shipping Fee by Region



#### Title

Average Shipping Fee by Region

#### Description

The Southern region has the highest average shipping fee of ₹ 93. While the lowest is the Eastern region with ₹ 59.51.

#### Insight

Areas nearer the Eastern region have lower shipping fees, where Southern and Northern shipping fees are the highest.

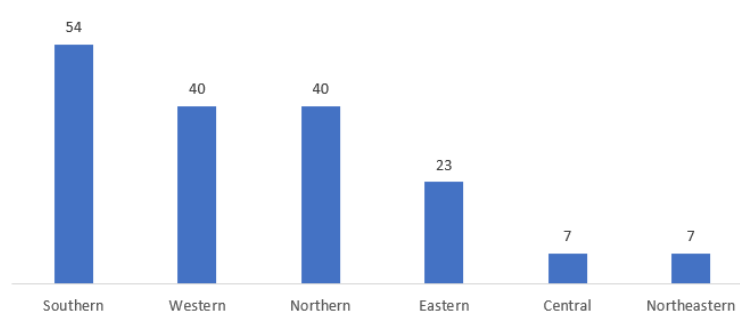
#### Assumption

The storehouse or base must be located in the Eastern region that is why the pricing is like this. But does this affect the willingness to order by the customers? We shall see in the next chart/s.

### Count of order\_no/SKU

Southern	54
Western	40
Northern	40
Eastern	23
Central	7
Northeastern	7
<b>Grand Total</b>	<b>171</b>

Order Count by Region



#### Title

Order Count by Region

#### Description

The Southern region has the highest total of orders with 54 orders throughout the period; while both Central and Northeastern regions have the least with 7 orders.

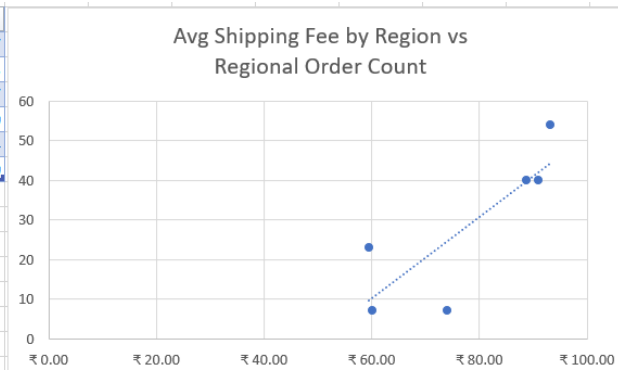
#### Insight

The Southern region still has the most orders, followed by a tie between the Western and Northern regions. While it is reasonable for people to buy more if the shipping fee is less, this does not appear to be the case since the Southern region having the highest shipping fee yet garnering the most orders.

#### Assumption

We'd like to see if there is a correlation between shipping fee and order count in our next analysis.

Region	avg_shipping_fee	regional_order_count
Central	₹ 74.10	7
Eastern	₹ 59.51	23
Northeastern	₹ 60.18	7
Northern	₹ 90.92	40
Southern	₹ 93.22	54
Western	₹ 88.80	40



#### Title

Average Shipping Fee vs Regional Order Count

#### Description

The chart describes the interaction of two variables: the average shipping fee per region and the total count of orders per region.

#### Insight

There appears to be a strong positive correlation between these two variables as shown by the steep and upward trajectory from left to right of the regression line. This means that despite the high shipping fee, more customers are actually ordering.

#### Assumption

I assume that since regions with the higher shipping fees are farther compared to the others, it is exactly this reason that the customers would prefer to order online (as opposed to buying in person).

#### Recommendation:

We want the company to gain more profit. And the trend shown seems to play in favor of the company. I recommend maximizing this opportunity by increasing shipping fees by a little more (in increments per quarter) until we see any signs of the correlation between shipping fee and distance turning negative. Until the correlation seems to plateau, that's the time we stop increasing the shipping fees.

-----END OF ANALYSIS-----