INDEX

INTRODUCTION

The Super Store's database keeps track of the following data fields:

- Order ID – Id of the order created by the customer.
- Order Date and Ship Date – Date when the item was ordered and the date when the item was shipped to the person.
- Shipping Mode – Mode of shipping
- Product Category – Category of the product
- Product – The product that was ordered
- Sales – Quantity of the items ordered
- Discount – Discount value on the product
- Profit – How much profit was earned on that product
- Order Priority – Priority of the order determining delivery
- Customer Name – Name of the person who ordered the item.
- Customer ID – Unique ID for each Customer
- Region – Region where the sales was made.
- Order Month – Month when the order took place.
- Manager – Managing Head of Regions
- Customer Segment – Tells about customer type

SCOPE OF ANALYSIS

The super store wants to see and analyze the sales trend month-wise and product-wise and work upon the lagging segments and outperforming employees accordingly. The Analytics team also wants to create analyze the database in depth to help the super store grow exponentially. The Analytics team wishes to answer the following objectives: -

1. Sales, Quantity and Profit of each product category
2. Segment Distribution of each product category
3. Sales and Profit throughout months of a sales of each product category
4. Regional Sales of each product category
5. Overall Sales Trend throughout months of a sales year
6. Distribution of Order Priority
7. Customer Ordering Trend
8. Analysis of work Performance of Regional Managers

9. Comparison of sales and profit product category wise
10. Analyzing Shipping priority share.

Aim of this project is to answer the above objectives in the form of visualization by creating a dashboard to convey the answers effectively and efficiently.

ETL PROCESS

In computing, extract, transform, load (ETL) is a process in database usage to prepare data for analysis, especially in data warehousing. Data extraction involves extracting data from homogeneous or heterogeneous sources, while data transformation processes data by transforming them into a proper storage format/structure for the purposes of querying and analysis; finally, data loading describes the insertion of data into the final target database such as an operational data store, a data mart, or a data warehouse. A properly designed ETL system extracts data from the source systems, enforces data quality and consistency standards, conforms data so that separate sources can be used together, and finally delivers data in a presentation-ready format so that application developers can build applications and end users can make decisions.

Precisely, ETL is defined as a process that extracts the data from different RDBMS source systems, then transforms the data (like applying calculations, concatenations, etc.) and finally loads the data into the Data Warehouse system. ETL stands for Extract, Transform and Load.

Before ETL, the dataset looked like this. **This data is taken from Kaggle.**

Name		id	Order ID	priority	off	Unit Price	Shipping
Kristine Connolly		553	359	Medium	0.08	124.49	51.94
Alexander O'Brien		3106	548	Critical	0.04	3.08	0.99
Alexander O'Brien		3106	548	Critical	0.02	6.48	5.9
Alexander O'Brien		3106	548	Critical	0.04	125.99	4.2
Maxine Collier Grady		1106	646	High	0.01	9.31	3.98
Geoffrey Saunders		2382	962	Low	0.06	122.99	19.99
Geoffrey Saunders		2382	962	Low	0.08	68.81	60
Kristine Connolly		553	2433	Not Specified	0.07	2036.48	14.7
Jenny Gold		699	3042	Medium	0.1	4.26	1.2
Ross Simpson		471	3138	Not Specified	0.07	179.99	19.99
Jacqueline Noble		342	3332	Critical	0.01	3.26	1.86
Caroline Johnston		102	3397	Medium	0.1	19.98	4
Caroline Johnston		102	3397	Medium	0.09	2.88	1.49
Wesley Waller		181	3585	High	0.07	1.68	1.57
Nina Horne Kelly		1733	3841	Not Specified	0.02	60.98	49
Nina Horne Kelly		1733	3841	Not Specified	0.02	1270.99	19.99
Andrew Gonzalez		2882	4839	Critical	0.05	6.48	8.73
Eleanor Swain		272	5509	Low	0.02	5.58	5.3
Eleanor Swain		272	5509	Low	0.03	40.89	18.98
Troy Cassidy		2431	5920	High	0.07	155.06	7.07
Louis Parrish		1193	5984	Low	0.03	10.64	5.16
Louis Parrish		1193	5984	Low	0.03	7.96	4.95

Through the process of ETL, we are going to clean the dataset and bring all the entities to their proper data format.

Step 1: Removing the blank cells from the dataset.

For this, select the whole dataset. Go to Find and Select in the Home tab of excel. Select Go to Special from the drop-down menu and then tick the blank option. All the blank cells will be selected. Then go to Delete option in the home tab again and select Delete Rows from the drop-down menu. This will remove any rows with blank cells.

Order Prio	Discount	Uni	Shipping	Customer ID	Customer N	Ship Mode	Customer Se	Product Category	Product	Product Container
Critical	0.06	9.5	7.29	11	Marcus Dunl	Regular Air	Home Office	Furniture	Office Fu	Small Pack
Critical	0	4.4	4.99	15	Timothy Ree	Regular Air	Small Business	Office Supplies	Envelope	Small Box
Critical	0.07	###	8.73	53	Sidney Russ	Delivery Truck	Corporate	Technology	Office Ma	Jumbo Box
Critical	0.06	8.6	6.14	123	Shawn Stern	Regular Air	Home Office	Office Supplies	Scissors,	Small Pack
Critical	0.04	19	9.54	136	Dale Gillespi	Regular Air	Small Business	Office Supplies	Paper	Small Box
Critical	0.09	11	3.37	136	Dale Gillespi	Regular Air	Small Business	Office Supplies	Scissors,	Small Pack
Critical	0.03	23	11.54	142	Brooke Wee	Regular Air	Small Business	Office Supplies	Paper	Small Box
Critical	0.05	11	3.37	144	Marguerite M	Regular Air	Small Business	Office Supplies	Scissors,	Small Pack
Critical	0.09	33	5.5	151	Geoffrey Zhu	Regular Air	Home Office	Technology	Compute	Small Box
Critical	0.09	2.9	0.7	152	Kent Kerr	Regular Air	Consumer	Office Supplies	Pens & A	Wrap Bag
Critical	0.01	96	4.9	156	Diana Xu	Regular Air	Corporate	Technology	Telephor	Small Box
Critical	0.05	1.9	1.49	171	Christina Mat	Regular Air	Corporate	Office Supplies	Binders a	Small Box
Critical	0.02	50	19.99	181	Wesley Wall	Regular Air	Small Business	Technology	Compute	Small Box
Critical	0.02	50	19.99	184	Phillip Holme	Regular Air	Small Business	Technology	Compute	Small Box
Critical	0	162	19.99	197	Samantha W	Regular Air	Small Business	Office Supplies	Storage a	Small Box
Critical	0	162	19.99	198	Leroy Blanch	Regular Air	Small Business	Office Supplies	Storage a	Small Box
Critical	0.06	280	23.19	234	Don Camero	Delivery Truck	Small Business	Office Supplies	Applianc	Jumbo Drum
Critical	0.02	2.6	1.3	250	Brenda Nels	Express Air	Corporate	Office Supplies	Pens & A	Wrap Bag
Critical	0.02	66	3.9	250	Brenda Nels	Regular Air	Corporate	Technology	Telephor	Small Box
Critical	0.03	8.3	2.64	256	Irene Li	Regular Air	Home Office	Office Supplies	Scissors,	Small Pack
Critical	0.04	2	0.7	276	Lucille Ranki	Express Air	Corporate	Office Supplies	Rubber E	Wrap Bag
Critical	0.03	56	5	282	Vickie Andre	Regular Air	Corporate	Technology	Telephor	Small Pack
Critical	0.09	28	1.99	288	Patricia Cole	Regular Air	Small Business	Technology	Compute	Small Pack
Critical	0.08	66	4.99	288	Patricia Cole	Express Air	Small Business	Technology	Telephor	Small Box
Critical	0.06	276	24.49	335	Curtis O'Conr	Regular Air	Corporate	Furniture	Chairs &	Large Box
Critical	0.09	6.3	5.29	335	Curtis O'Conr	Regular Air	Corporate	Furniture	Office Fu	Small Box
Critical	0.01	3.3	1.86	342	Jacqueline N	Regular Air	Corporate	Office Supplies	Pens & A	Wrap Bag
Critical	0.03	15	27.75	343	Lynn Epstein	Delivery Truck	Corporate	Furniture	Tables	Jumbo Box

Step 2: Removing columns which are not properly defined or not crucial to our analysis.

For this we will columns which are redundant like the column with just the index numbers. For this we will select that column and then go to delete option in the home tag and then select Delete Columns from the drop-down menu.

Row ID	Order Priorit	Discoun	Unit Pric	Shipping Co	Customer II	Customer Name	Ship Mode	Customer Segme	Product Catego
24926	Critical	0.09	517.48	16.63	1020	Julie Porter	Delivery Truck	Small Business	Technology
23562	Critical	0.07	4.13	5.04	1020	Julie Porter	Regular Air	Small Business	Office Supplies
23563	Critical	0	4.48	2.5	1020	Julie Porter	Regular Air	Small Business	Office Supplies
18921	Critical	0.02	39.06	10.55	1023	Glen Newman	Regular Air	Small Business	Office Supplies
18922	Critical	0.1	37.7	2.99	1023	Glen Newman	Regular Air	Small Business	Office Supplies
21959	Critical	0.07	125.99	2.5	1035	Kent Burton	Regular Air	Home Office	Technology
21960	Critical	0.03	99.99	19.99	1036	Jessica Huffman	Regular Air	Home Office	Technology
20669	Critical	0.1	7.64	5.83	1038	Jon Hale	Regular Air	Corporate	Office Supplies
18404	Critical	0.06	55.94	4	1041	Mildred Chase	Regular Air	Small Business	Technology
18405	Critical	0.07	6.3	0.5	1041	Mildred Chase	Regular Air	Small Business	Office Supplies
20937	Critical	0	14.42	6.75	1042	Jerome Burch	Express Air	Small Business	Office Supplies
3926	Critical	0.02	209.84	21.21	1044	Erin Ballard	Regular Air	Home Office	Furniture
3927	Critical	0.01	194.3	11.54	1044	Erin Ballard	Regular Air	Home Office	Furniture
19445	Critical	0.01	15.99	13.18	1065	Vicki Bond	Regular Air	Corporate	Office Supplies
26060	Critical	0.01	2.89	0.5	1113	Julia Reynolds	Regular Air	Corporate	Office Supplies
26061	Critical	0	55.99	5	1113	Julia Reynolds	Regular Air	Corporate	Technology
24224	Critical	0.09	9.11	2.15	1155	Alex Nicholson	Express Air	Consumer	Office Supplies
24225	Critical	0.08	15.04	1.97	1155	Alex Nicholson	Regular Air	Consumer	Office Supplies
24358	Critical	0.07	400.97	48.26	1186	Glenda Herbert	Delivery Truck	Consumer	Technology
21206	Critical	0.1	120.98	9.07	1233	Gary Hester	Express Air	Consumer	Office Supplies
21207	Critical	0.02	152.48	6.5	1233	Gary Hester	Express Air	Consumer	Technology
20233	Critical	0.06	200.97	15.59	1241	Bradley Schroeder	Delivery Truck	Small Business	Technology
23815	Critical	0.06	80.98	35	1254	Anne Bland	Regular Air	Home Office	Office Supplies
18693	Critical	0.04	2.52	1.92	1257	Ryan Foster	Regular Air	Home Office	Office Supplies
21771	Critical	0.02	73.98	14.52	1261	Vickie Gonzalez	Regular Air	Home Office	Technology
24559	Critical	0.05	5.28	6.26	1265	Danielle Kramer	Regular Air	Home Office	Office Supplies
23363	Critical	0.01	13.98	7.51	1267	Rosemary Branch	Regular Air	Corporate	Technology

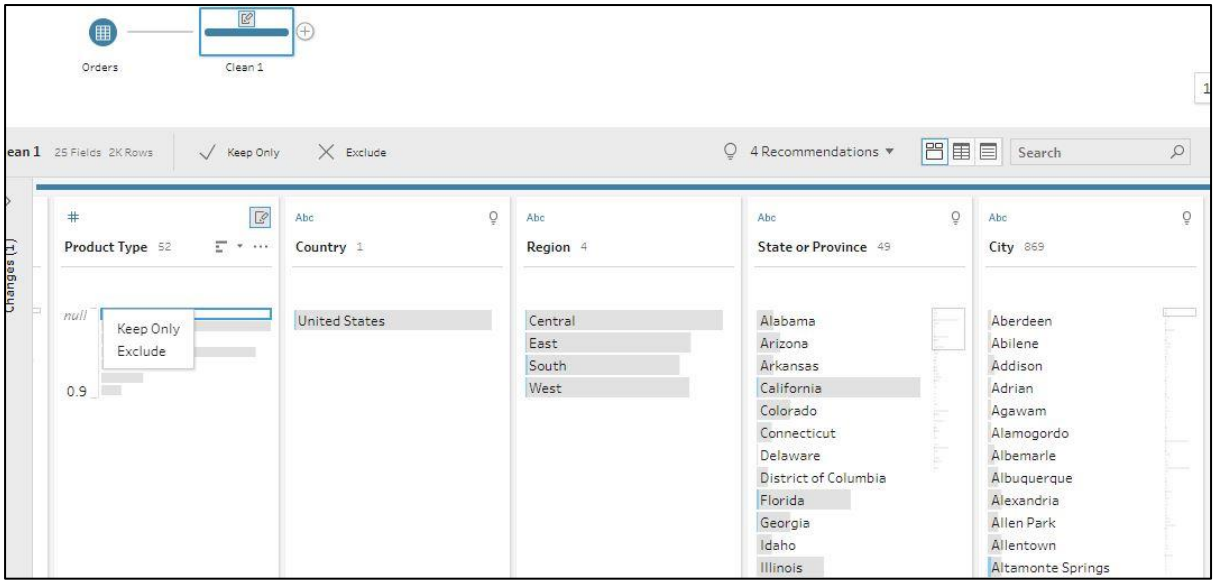
Step 3: Giving proper and appropriate column names.

The dataset does not have proper columns so our next step would be to giver proper column names to the columns wherever required.

Order I	Discount	Unit Pric	Shipping	Customer ID	Customer N	Ship Mode	Customer Se	Product Category	Product Sub-Ca	Product Container
Critical	0.06	9.48	7.29	11	Marcus Dunl	Regular Air	Home Office	Furniture	Office Furnishings	Small Pack
Critical	0	4.42	4.99	15	Timothy Ree	Regular Air	Small Business	Office Supplies	Envelopes	Small Box
Critical	0.07	3502.14	8.73	53	Sidney Russ	Delivery Truck	Corporate	Technology	Office Machines	Jumbo Box
Critical	0.06	8.57	6.14	123	Shawn Stern	Regular Air	Home Office	Office Supplies	Scissors, Rulers a	Small Pack
Critical	0.04	18.97	9.54	136	Dale Gillespi	Regular Air	Small Business	Office Supplies	Paper	Small Box
Critical	0.09	10.98	3.37	136	Dale Gillespi	Regular Air	Small Business	Office Supplies	Scissors, Rulers a	Small Pack
Critical	0.03	22.84	11.54	142	Brooke Wee	Regular Air	Small Business	Office Supplies	Paper	Small Box
Critical	0.05	10.98	3.37	144	Marguerite M	Regular Air	Small Business	Office Supplies	Scissors, Rulers a	Small Pack
Critical	0.09	32.98	5.5	151	Geoffrey Zhu	Regular Air	Home Office	Technology	Computer Periphe	Small Box
Critical	0.09	2.88	0.7	152	Kent Kerr	Regular Air	Consumer	Office Supplies	Pens & Art Supplie	Wrap Bag
Critical	0.01	95.99	4.9	156	Diana Xu	Regular Air	Corporate	Technology	Telephones and C	Small Box
Critical	0.05	1.88	1.49	171	Christina Mat	Regular Air	Corporate	Office Supplies	Binders and Binde	Small Box
Critical	0.02	49.99	19.99	181	Wesley Wall	Regular Air	Small Business	Technology	Computer Periphe	Small Box
Critical	0.02	49.99	19.99	184	Phillip Holme	Regular Air	Small Business	Technology	Computer Periphe	Small Box
Critical	0	161.55	19.99	197	Samantha W	Regular Air	Small Business	Office Supplies	Storage & Organiz	Small Box
Critical	0	161.55	19.99	198	Leroy Blanch	Regular Air	Small Business	Office Supplies	Storage & Organiz	Small Box
Critical	0.06	279.81	23.19	234	Don Camero	Delivery Truck	Small Business	Office Supplies	Appliances	Jumbo Drum
Critical	0.02	2.58	1.3	250	Brenda Nels	Express Air	Corporate	Office Supplies	Pens & Art Supplie	Wrap Bag
Critical	0.02	65.99	3.9	250	Brenda Nels	Regular Air	Corporate	Technology	Telephones and C	Small Box
Critical	0.03	8.34	2.64	256	Irene Li	Regular Air	Home Office	Office Supplies	Scissors, Rulers a	Small Pack
Critical	0.04	1.98	0.7	276	Lucille Ranki	Express Air	Corporate	Office Supplies	Rubber Bands	Wrap Bag
Critical	0.03	55.99	5	282	Vickie Andre	Regular Air	Corporate	Technology	Telephones and C	Small Pack
Critical	0.09	28.48	1.99	288	Patricia Cole	Regular Air	Small Business	Technology	Computer Periphe	Small Pack
Critical	0.08	65.99	4.99	288	Patricia Cole	Express Air	Small Business	Technology	Telephones and C	Small Box
Critical	0.06	276.2	24.49	335	Curtis O'Conr	Regular Air	Corporate	Furniture	Chairs & Chairmat	Large Box

Step 4: Excluding the NULL values from the data.

We'll be using Tableau prep for this work as it'll make the work simple and faster because we might not know how many null values could be there in this huge data set. Tableau helps us doing one step cleaning with ease.



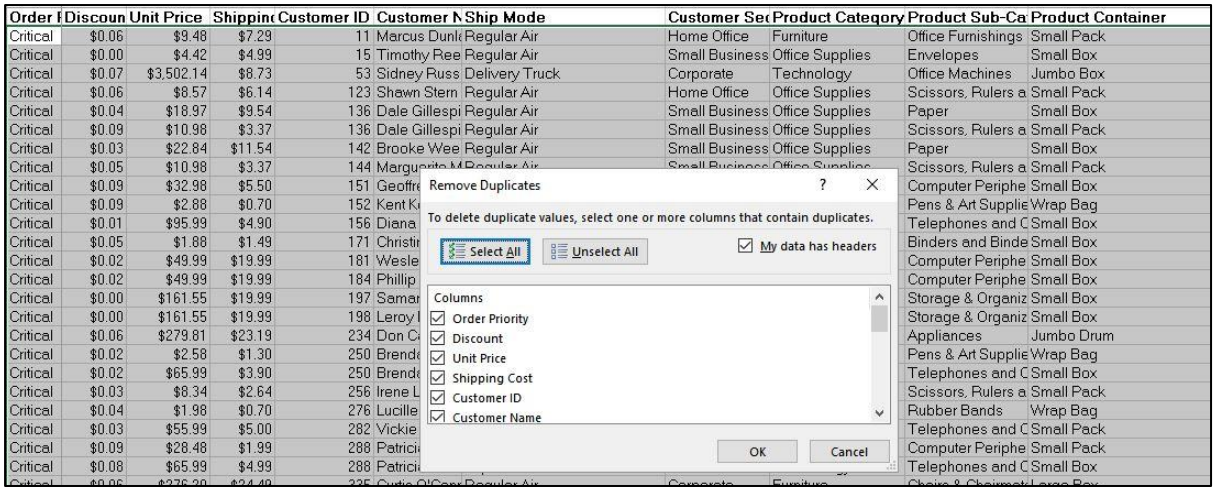
Step 5: Improvising Proper Data Formatting

Without proper Data Formatting, proper analysis will not take place. So, we will bring down certain columns to their proper format. For example, the dates should be in the date format and price and sales should be in currency format for better results.

Order I	Discoun	Unit Price	Shippin	Customer ID	Customer N	Ship Mode	Customer Se	Product Category	Product Sub-Ca	Product Cont
Critical	$0.06	$9.48	$7.29	11	Marcus Dunl	Regular Air	Home Office	Furniture	Office Furnishings	Small Pack
Critical	$0.00	$4.42	$4.99	15	Timothy Ree	Regular Air	Small Business	Office Supplies	Envelopes	Small Box
Critical	$0.07	$3,502.14	$8.73	53	Sidney Russ	Delivery Truck	Corporate	Technology	Office Machines	Jumbo Box
Critical	$0.06	$8.57	$6.14	123	Shawn Stern	Regular Air	Home Office	Office Supplies	Scissors, Rulers a	Small Pack
Critical	$0.04	$18.97	$9.54	136	Dale Gillespi	Regular Air	Small Business	Office Supplies	Paper	Small Box
Critical	$0.09	$10.98	$3.37	136	Dale Gillespi	Regular Air	Small Business	Office Supplies	Scissors, Rulers a	Small Pack
Critical	$0.03	$22.84	$11.54	142	Brooke Wee	Regular Air	Small Business	Office Supplies	Paper	Small Box
Critical	$0.05	$10.98	$3.37	144	Marguerite M	Regular Air	Small Business	Office Supplies	Scissors, Rulers a	Small Pack
Critical	$0.09	$32.98	$5.50	151	Geoffrey Zhu	Regular Air	Home Office	Technology	Computer Periphe	Small Box
Critical	$0.09	$2.88	$0.70	152	Kent Kerr	Regular Air	Consumer	Office Supplies	Pens & Art Supplie	Wrap Bag
Critical	$0.01	$95.99	$4.90	156	Diana Xu	Regular Air	Corporate	Technology	Telephones and C	Small Box
Critical	$0.05	$1.88	$1.49	171	Christina Mat	Regular Air	Corporate	Office Supplies	Binders and Binde	Small Box
Critical	$0.02	$49.99	$19.99	181	Wesley Wall	Regular Air	Small Business	Technology	Computer Periphe	Small Box
Critical	$0.02	$49.99	$19.99	184	Phillip Holme	Regular Air	Small Business	Technology	Computer Periphe	Small Box
Critical	$0.00	$161.55	$19.99	197	Samantha W	Regular Air	Small Business	Office Supplies	Storage & Organiz	Small Box
Critical	$0.00	$161.55	$19.99	198	Leroy Blanch	Regular Air	Small Business	Office Supplies	Storage & Organiz	Small Box
Critical	$0.06	$279.81	$23.19	234	Don Camero	Delivery Truck	Small Business	Office Supplies	Appliances	Jumbo Drum
Critical	$0.02	$2.58	$1.30	250	Brenda Nels	Express Air	Corporate	Office Supplies	Pens & Art Supplie	Wrap Bag
Critical	$0.02	$65.99	$3.90	250	Brenda Nels	Regular Air	Corporate	Technology	Telephones and C	Small Box
Critical	$0.03	$8.34	$2.64	256	Irene Li	Regular Air	Home Office	Office Supplies	Scissors, Rulers a	Small Pack
Critical	$0.04	$1.98	$0.70	276	Lucille Ranki	Express Air	Corporate	Office Supplies	Rubber Bands	Wrap Bag
Critical	$0.03	$55.99	$5.00	282	Vickie Andre	Regular Air	Corporate	Technology	Telephones and C	Small Pack
Critical	$0.09	$28.48	$1.99	288	Patricia Cole	Regular Air	Small Business	Technology	Computer Periphe	Small Pack

Step 6: Removing Duplicate Values

It might be possible that our data may be containing duplicate values which may hinder in precise analysis. So, our last task in ETL will be removing duplicate values and making our data perfect for analysis.



ANALYSIS OF DATASET

1. **Monthly Sales and profit of each category**

   Description:

   By knowing about sales and profit over month we can know about the months which are more profitable for sales and hence customize our advertisement plan to increase the sales even more. After finding out the sales and profit we visualize the result with the help of a stacked bar graph.

   Specific function and requirements

   We have to create a pivot table. No specific functions are used. We then put the priority c and count of their respective sales in the columns of the pivot table.

   Results:

Month	Monthly Sales	Monthly Profit
Jan	240998.4700	-9818.4254
Feb	346066.8100	45600.6794
Mar	252497.0600	-2766.8951
Apr	381645.9100	50780.8532
May	303301.2300	62756.3697
Jun	334850.1500	58517.7420
Jul	22165.1400	9953.0759
Grand Total	**1881524.77**	**215023.3997**

Visualization:

The results are then visualized in the form of a stacked bar graph for both profit and sales

2. **Segment Distribution of each product category:**

Description:

By knowing which segment of sales has the greatest number of sales and which has least we can identify factors which affect the sales and thereby improve our strategy of

making sales.

Specific function and requirements

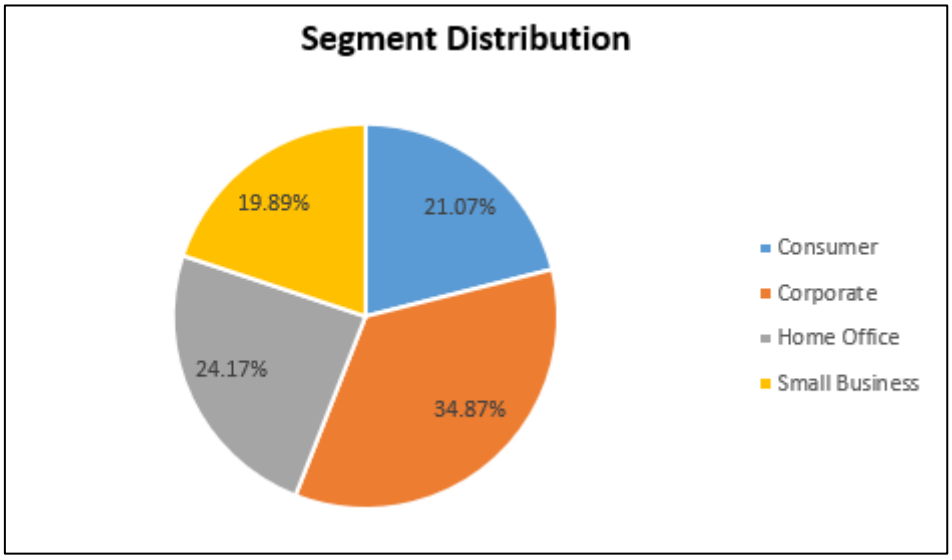
We have to create a pivot table. No specific functions are used. We then put the priority c and count of their respective sales in the columns of the pivot table.

Results:

Customer Type	Count of Customer Segment
Consumer	408
Corporate	675
Home Office	468
Small Business	385
Grand Total	**1936**

Visualization:

We will use a pie chart to visualize the distribution.



3. **Sales throughout months of a sales year.**

   Description:

   Monthly sales can help us identify which month is more profitable and helps identify the factor which helps us to do so. We can apply the identified the factors in other months to increase the sales.

   Specific function and requirements:

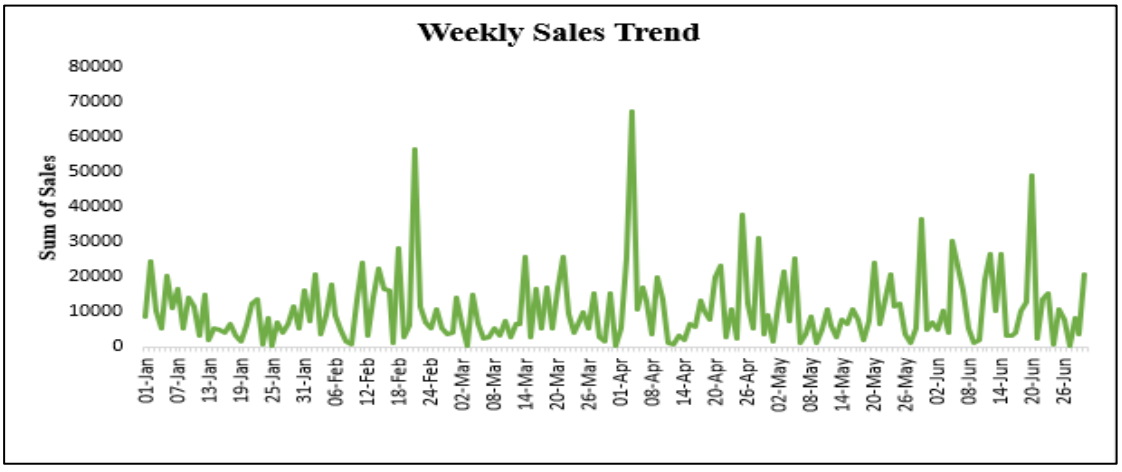
   We have to create a pivot table. No specific functions are used. We then put the months and sum of sales in the columns.

   Results:

Row Labels	Sum of Sales	Month
01-Jan	8666.18	January
02-Jan	24319.92	January
03-Jan	10134.42	January
04-Jan	5470.58	January
05-Jan	20160.51	January
06-Jan	11123.41	January
07-Jan	16551.82	January
08-Jan	5388.84	January
09-Jan	13926.83	January
10-Jan	11520.37	January
11-Jan	3355.12	January
12-Jan	14882.67	January
13-Jan	1772.04	January
14-Jan	5200.19	January
15-Jan	4829.95	January
16-Jan	3964.13	January
17-Jan	6667.69	January
18-Jan	2987.38	January
19-Jan	1652.89	January
20-Jan	6109.01	January
21-Jan	12281.51	January

Visualization:

The results are visualized with the help of line graph with a trend line displaying the trend of sales over months.



4. **Sales and their priority**

Description:

Every sale is going to have an order priority associated with it. Greater the priority, faster the item would be shipped out and received.

Specific function and requirements

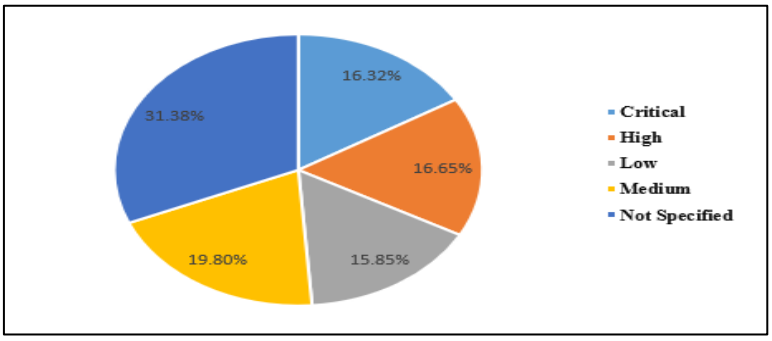
We have to create a pivot table. No specific functions are used. We then put the priority c and count of their respective sales in the columns of the pivot table.

Results:

Row Labels	Percentage Of Order Type
Critical	16.32%
High	16.65%
Low	15.85%
Medium	19.80%
Not Specified	31.38%
Grand Total	**100.00%**

Visualization:

We visualize the above results with the help a pie chart created using pivot charts.



5. **Comparison of sales of each product category**

Description:

By comparing sales of each product category side by side, we can come to know what kind of products are sold the most and which the least. This information can help us target customers more effectively to improve the sales and thus by increasing profits which is the main goal of any organization.

Specific function and requirements:

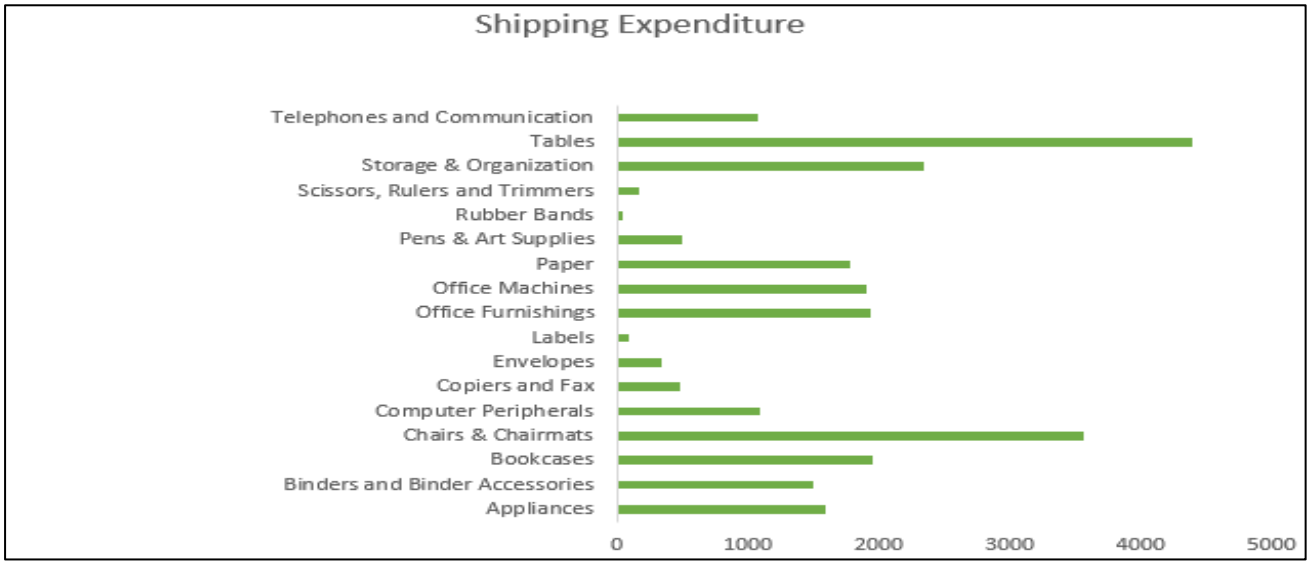
We have to create a pivot table. No specific functions are used. Product category is used as columns with summation of profit and sales of each product category.

Results:

Row Labels	Sales Category
Appliances	1589.65
Binders and Binder Accessories	1493.36
Bookcases	1957.71
Chairs & Chairmats	3560.59
Computer Peripherals	1094.84
Copiers and Fax	476.99
Envelopes	334.03
Labels	93.03
Office Furnishings	1942.03
Office Machines	1903.64
Paper	1777.19
Pens & Art Supplies	498.16
Rubber Bands	46.54
Scissors, Rulers and Trimmers	163.95
Storage & Organization	2349.54
Tables	4397.51
Telephones and Communication	1069.67
Grand Total	**24748.43**

Visualization:

The results are visualized in the form of stacked bar graph.



6. Employee Performance

Description:

In this we analyze which regional manager is doing well and which one is performing the least. It'll help us giving them incentives, promoting them and training them for better performance,

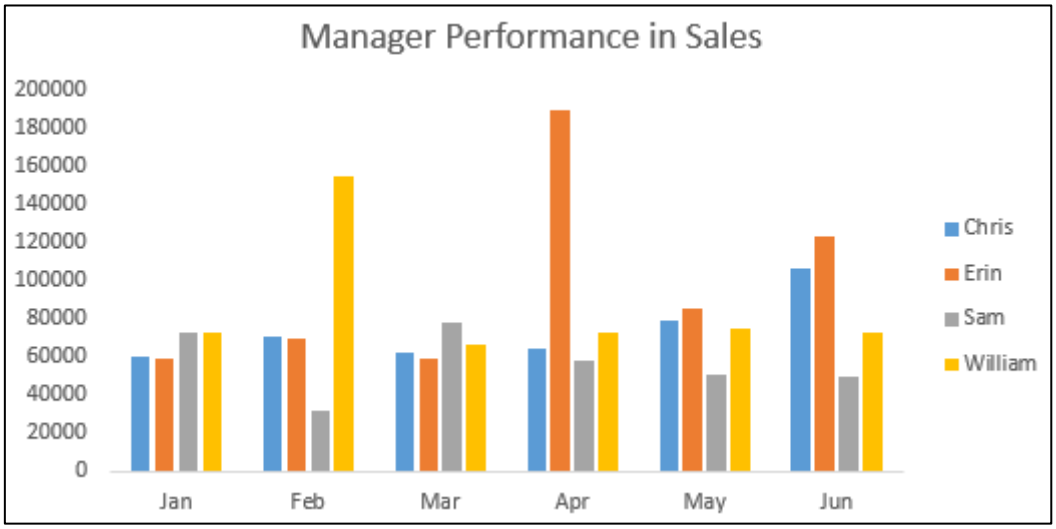
Specific function and requirements:

We have to create a pivot table. No specific functions are used.

Results:

Sum of Sales	Manager				
Month	Chris	Erin	Sam	William	Grand Total
⊞Jan	59702.73	59185.16	73062.34	73048.32	264998.55
⊞Feb	70282.44	69109.8	31754.39	154355.81	325502.44
⊞Mar	62075.31	59137.04	77874.78	66080	265167.13
⊞Apr	64058.38	189208.29	58285.11	72477.41	384029.19
⊞May	79253.14	84858.81	50887.39	75231.51	290230.85
⊞Jun	106073.62	123225.09	49464.31	72833.59	351596.61
Grand Total	441445.62	584724.19	341328.32	514026.64	1881524.77

Visualization:



7. Regional Sales Analysis

Description:

In this we analyze which region is having the greatest number of sales and which is least. Furthermore, we can look upon the factors which might be impacting the sales and we can look upon them to increase the sales and invest in the areas of maximum sales.

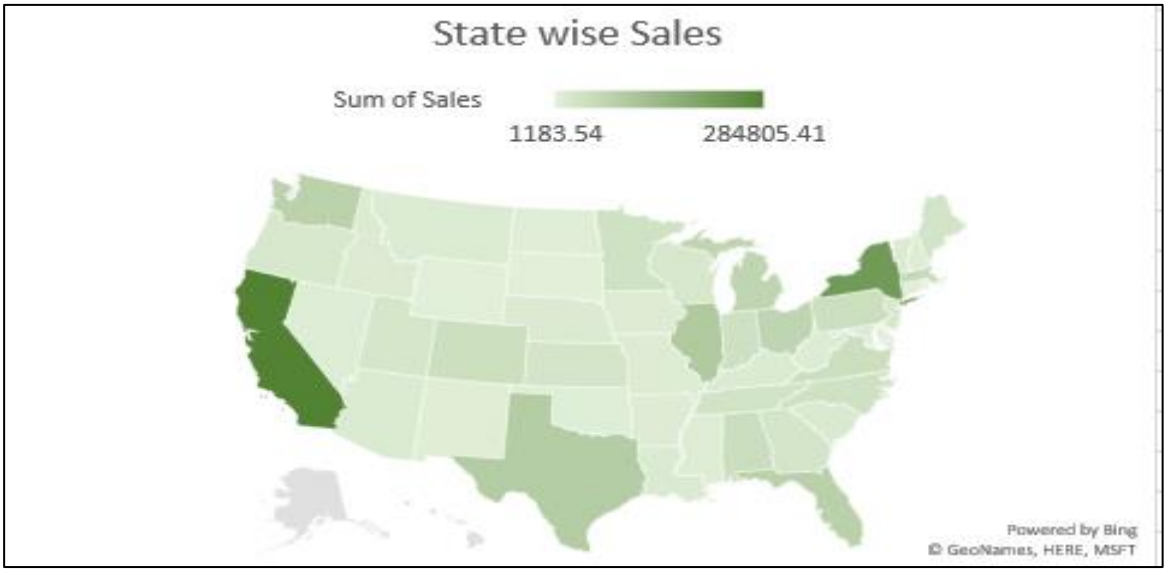
Specific function and requirements:

We have to create a pivot table. No specific functions are used.

Results:

State or Province	Sum of Sales
Alabama	46826.45
Arizona	14367.86
Arkansas	11724.43
California	284805.41
Colorado	45843.45
Connecticut	6540.54
Delaware	1257.76
District of Columbia	68946.66
Florida	81205.22
Georgia	29050.79
Idaho	13922.92
Illinois	98971.25
Indiana	39314.55
Iowa	10977.69

Visualization:



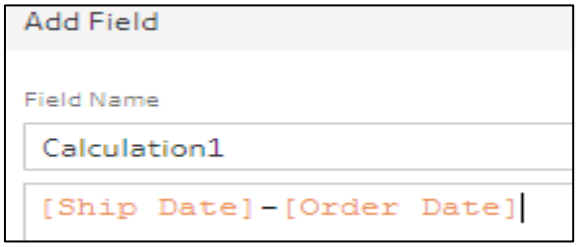
8. **Days to Ship a Product**

Description:

In this we analyze how much time the super store is taking to ship a product after successful placement of order by the user. This can help us to improve the customer service and improve the service quality provided to the customer.

Specific function and requirements:

We are using Tableau prep for this and simply creating a calculated field .



Results:

Order Date	Ship Date	DAYS TO SHIP
07/01/2015	08/01/2015	1
13/06/2015	15/06/2015	2
15/02/2015	17/02/2015	2
12/05/2015	14/05/2015	2
12/05/2015	13/05/2015	1
12/05/2015	13/05/2015	1
12/05/2015	13/05/2015	1
08/04/2015	09/04/2015	1
28/05/2015	28/05/2015	0

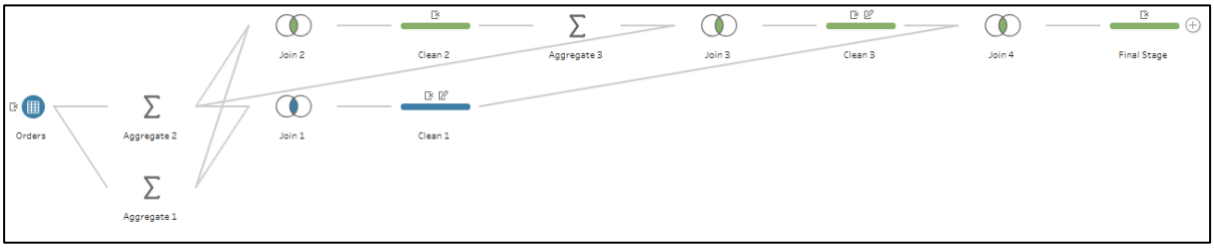
9. **Customer Ordering Trend**

Description:

In this we analyze after how much time does a particular revisit us and places the order again. We can create offers and Discounts accordingly and increase the customer engagement for frequent visits. This will ultimately help us to improve the customer service and improve the service quality provided to the customer.

Specific function and requirements:

We are using Tableau prep for this and applying aggregate function to extract the first order date and the second order date and then finally joining them in a single field.



Results:

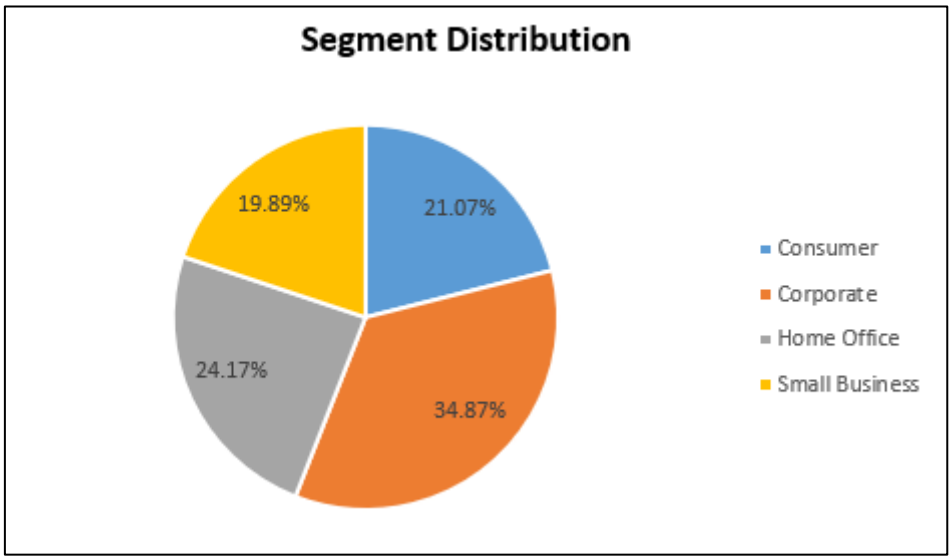
Customer ID	1st Purchased Date	2nd Purchase Order Date
2,391	25/05/2015	04/06/2015
210	17/01/2015	02/06/2015
2,548	04/04/2015	21/04/2015
2,668	28/03/2015	21/04/2015
2,840	19/03/2015	11/06/2015
181	21/02/2015	22/05/2015
1,683	14/02/2015	14/03/2015
2,797	10/01/2015	21/01/2015
1,341	10/02/2015	06/06/2015
92	17/05/2015	07/06/2015
1,026	07/02/2015	29/05/2015
3,230	21/01/2015	13/06/2015
898	12/01/2015	27/01/2015
1,671	09/02/2015	12/05/2015
1,416	06/05/2015	25/06/2015

ANALYSIS RESULTS

1. Monthly Profit Trend

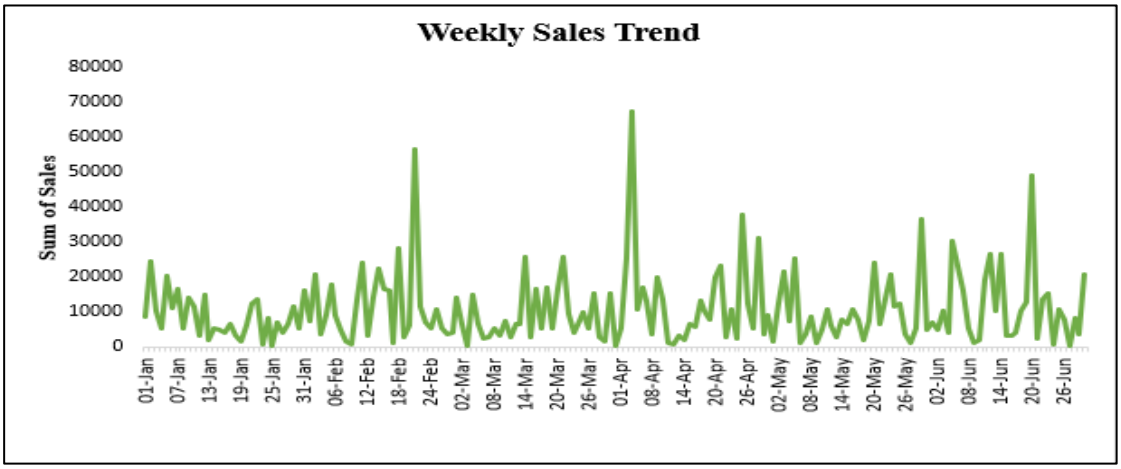
Sales was high in the Jan but still resulted in negative profit i.e. loss. Still the super store managed to work well and increase the profit exponentially by the end of Jun.

2. Segment Distribution of each product category



Corporate Sector is our valuable customer followed by Home Office. We can offer them special discounts and can have tie ups to increase the engagement. Further, Small Business is lagging in our partnership and we can offer them new offers for more sales.

3. **Sales throughout months of a sales year.**



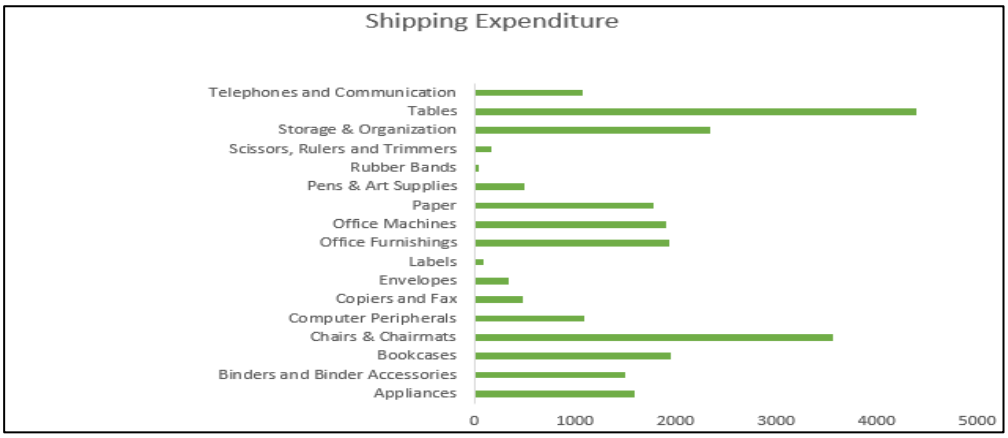
Sales were at peak once in mid Feb and again in Starting of the April followed by June End. We can create offers for other times as well to increase the sales growth.

4. **Sales and their priority**

Row Labels	Percentage Of Order Type
Critical	16.32%
High	16.65%
Low	15.85%
Medium	19.80%
Not Specified	31.38%
Grand Total	**100.00%**

We are having more of the orders without any priority followed by medium priority. We can enhance this by introducing faster services ultimately increasing the revenue.

5. Comparison of sales of each product category



Tables are our best-selling products followed by chairs and chair mats. We can work upon the one's not performing well to increase their sales also.

6. Employee Performance

Sum of Sales	Manager				
Month	Chris	Erin	Sam	William	Grand Total
⊞ Jan	59702.73	59185.16	73062.34	73048.32	264998.55
⊞ Feb	70282.44	69109.8	31754.39	154355.81	325502.44
⊞ Mar	62075.31	59137.04	77874.78	66080	265167.13
⊞ Apr	64058.38	189208.29	58285.11	72477.41	384029.19
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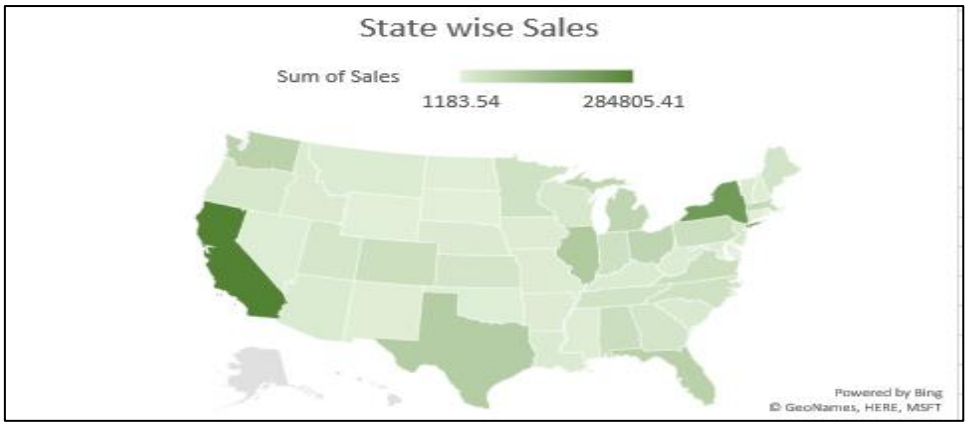
Grand Total	441445.62	584724.19	341328.32	514026.64	1881524.77

Erin was our best employee for this quarter with maximum sales whereas Sam lagged everyone with a huge margin and needs to perform well in the other half of the year.

7. Regional Sales



We performed the best in California followed by New York and Texas. We might think of opening a store in those places in future.

8. Days to Ship Products

Order Date	Ship Date	DAYS TO SHIP
07/01/2015	08/01/2015	1
13/06/2015	15/06/2015	2
15/02/2015	17/02/2015	2
12/05/2015	14/05/2015	2
12/05/2015	13/05/2015	1
12/05/2015	13/05/2015	1
12/05/2015	13/05/2015	1
08/04/2015	09/04/2015	1
28/05/2015	28/05/2015	0

The products are shipped within 2 days of the order date according to their priority.

9. Customer ordering Trend

Customer ID	1st Purchased Date	2nd Purchase Order Date
2,391	25/05/2015	04/06/2015
210	17/01/2015	02/06/2015
2,548	04/04/2015	21/04/2015
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898	12/01/2015	27/01/2015
1,671	09/02/2015	12/05/2015
1,416	06/05/2015	25/06/2015

The frequency of Customer is quite low and needs to be improved to maintain a good profit and growth of the Super Store.

FINAL DASHBOARD