

## REPORT :

### Problem Statement:

Sales management has gained importance to meet increasing competition and the need for improved methods of distribution to reduce cost and to increase profits. Sales management today is the most important function in a commercial and business enterprise. So we are performing the sales analysis for amazon food sales

This dataset contains year-wise data of sales Year-wise sales analysis quarter-wise sales analysis monthly-wise sales analysis Find key metrics and factors and show the meaningful relationships between attributes. Do your own research and come up with your findings

### Data set:

```
In [4]: pd.read_excel('SALESDATA.xlsx')
```

```
Out[4]:
```

	CustKey	DateKey	Discount Amount	Invoice Date	Invoice Number	Item Class	Item Number	Item	Line Number	List Price	Sales Amount	Sales Amount Based on List Price	Sales Cost Amount	Sales Margin Amount	Sales Price
0	10010923	2018-03-21	2805.9000	2018-03-21	226563	P01	63590	Gorilla Low Fat String Cheese	8000	298.0000	1374.10	2980.0000	954.13	419.97	137.410000
1	10010923	2018-03-21	2408.8500	2018-03-21	226563	P01	62616	Tell Tale Limes	10000	298.0000	2061.15	4470.0000	1430.18	630.96	137.410000
2	10010923	2018-03-21	603.9800	2018-03-21	226563	P01	28929	Nationall Potato Chips	1000	37.3600	516.81	1120.8000	222.82	293.98	17.227000
3	10010923	2018-03-21	272.1710	2018-03-21	226563	P01	61464	Super Creamy Peanut Butter	4000	50.5051	232.88	505.0510	152.43	90.45	23.288000
4	10010923	2018-03-21	481.7700	2018-03-21	226563	P01	63559	Gorilla String Cheese	9000	298.0000	412.23	894.0000	295.44	126.79	137.410000
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
65277	10002969	2018-06-08	173.3500	2018-06-08	303217	P01	45880	Red Spade Low Fat Bologna	3000	433.3800	4160.45	4333.8000	2807.49	1362.96	416.045000
65278	10015495	2018-06-28	333.7500	2018-06-28	305106	NaN	36013	Big Time Frozen Mushroom Pizza	1000	0.0000	333.70	0.0000	186.06	138.65	8.342500
65279	10000000	2018-06-28	100.0000	2018-06-28	305106	NaN	36013	Big Time Frozen Mushroom Pizza	1000	0.0000	100.00	0.0000	55.56	44.44	100.000000

```
In [6]: 1 pd.read_excel('CUSTOMERS.xls')
```

Out[6]:

	Address Number	Business Family	Business Unit	Customer	Customer Number	Customer Type	Division	Line of Business	Phone	Region Code	Regional Sales Mgr	Search Type	Unnamed: 12
0	10000000	R3	1	City Supermarket	10000000	G2	2		816-455-8733	4	S16	C	NaN
1	10000453	R3	1	A Supermarket	10000453	G1	1		816-455-8733	5	S19	C	NaN
2	10000455	R3	1	Carbarn Supermarket	10000455	G2	2		816-455-8733	1	S16	C	NaN
3	10000456	R1	1	A&B Shop	10000456	G3	1		816-455-8733	0	S2	C	NaN
4	10000457	G2	1	A&G Shop	10000457	G1	1		816-455-8733	5	S1	C	division
...	...	...	...	...	...	...	...	...	...	...	...	...	...
879	10027560	R2	1	Zlog Shop	10027560	G2	2		816-455-8733	2	S1	C	NaN
880	10027572	R3	1	ZpLip Com Shop	10027572	G2	2		816-455-8733	3	S1	C	NaN
881	10027575	R3	1	Zitel Shop	10027575	G2	2		816-455-8733	2	S1	C	NaN
882	10027583	R2	1	zNET Shop	10027583	G2	2		816-455-8733	4	S5	C	NaN

```
In [5]: 1 pd.read_excel('CUSTOMERADDRESS.xls')
```

Out[5]:

	Address Number	City	Country	Customer Address 1	Customer Address 2	Customer Address 3	Customer Address 4	State	Zip Code
0	10000471	Jeddah	AU	Al Thalia Street	PO Box 11605			NaN	11443
1	10004255	Seoul	AU	3F Shinwoo Building	195-12 Poi-Dong Kangnam-KU			NaN	135-260
2	10007117	Taipei	AU	8F No.19 Chang Chun Road				NaN	104
3	10010923	Seocho-GU	AU	231 Yangjae Dong				NaN	137-938
4	10013011	112 Reyjavik	AU	Vagnhofda 23				NaN	
...	...	...	...	...	...	...	...	...	...
450	10027560	Odessa	US	3356 Kermit Highway				TX	79764
481	10027572	Elma	US	2210 Bowen Road				NY	14059
452	10027575	Dallas	US	10400 Plano Road				TX	75238
453	10027583	Morton	US	Attention: Charlene Hoyer	500 North Morton Avenue	PO Box 474		IL	61550-0474
454	10027629	Dearborn	US	Central Accounting Service	PO Box 6005			MI	48121

455 rows x 9 columns

The dataset consists of 3 excel sheets . Description of data: File1: Sales Data -----it contains sales of all the items and sales amount File2: Customer Address -----it contains address of the customers File3: Customers----- it contains information of the customers.

Here ,

- Cust-key is primary key and address number is foreign key.
- Date key = invoice date = promised delivery date .
- Discount Amount = Sales Amount Based on List Price – Sales Amount
- item ---- names of items
- List Price---- sum of price of all items in list based on its MRP
- Sales Amount ---- it is the price given by the customer
- Sales Amount Based on List Price= List Price \* Sales Quantity
- Sales Cost Amount --- it is an actual price paid by amazon to buy particular item.
- Sales Margin Amount--- Sales Amount- Sales Cost Amount
- Sales Price-----price of one item
- Sales Quantity --- number of items bought