Salesman Analysis

Aim of Project

The Salesman Analysis Project aims to provide insights and optimize the performance of sales representatives within a company. This project involves collecting, processing, and analyzing various data related to sales activities, customer interactions, and performance metrics of salesmen.

The objective of this project is to conduct a comprehensive analysis of sales data to gain valuable insights into the performance of our sales team and identify areas for improvement. By leveraging data analytics, we aim to enhance decision-making processes, optimize sales strategies, and ultimately increase revenue.

Representation of this project:-

Database Name: sales_analysis

Show the table structure of Sales Team:

Query:

SELECT * FROM sales_man;

	salesman_id	salesman_name	mobileno	emailid	city	designation	level
•	1	John Doe	1234567890	john.doe@email.com	New York	Sales Manager	1
	2	Jane Smith	9876543210	jane.smith@email.com	Los Angeles	Senior Sales Executive	2
	3	Kartik Sharma	4567891234	kartik.sharma@gmail.com	India	Sales Executive	3
	4	Anusha Bansal	2345678911	anusha.bansal@gmail.com	India	Sales Executive Trainee	4
	5	Vaibhav Jindal	3456789123	vaibhav.jindal@gmail.com	India	Sales Executive	3
	6	Nick Johns	6789123412	nick.johns@gmail.com	Australia	Sales Mangaer	1
	7	Khushboo Garg	9876543215	khushboo.garg@gmail.com	India	Sales Executive Trainee	4
	8	Dolly JIndal	7890123456	dolly.jindal@gmail.com	India	Senior Sales Executive	2
	9	Sudhanshu Mishra	9876543217	sudhanshu.mishra@gmail.com	India	Sales Executive	3
	10	Chirag Verma	9435672861	chirag.verma@gmail.com	India	Sales Manager	1

Show the table structure of Brands:-

Query:

SELECT * FROM brand;

	brand_id	brand_name
•	1	Lakmi
	2	Maybelline
	3	Bata
	4	Puma
	5	Biba
	NULL	NULL

Show the table structure of Categories:-

Query:

SELECT * FROM category;

cat_id	cat_name	brand_id
76	Skin care	1
77	Makeup	1
78	Nail care	1
79	Hair care	1
80	Lip care	1
81	Face makeup	2
82	Eye makeup	2
83	Lip products	2
84	Skin care	2
85	Nail care	2
86	Casual Foot	3
87	Formal Foot	3
88	Athletic and	3
89	Sandals and	3
90	Accessories	3

.....so on

Show the table structure of Product:-

Query:

SELECT * FROM product;

product_id	product_name	price	gst	discount	brand_id	cat_id
1	Sunscream	515	4	2.5	1	76
2	Moisturizer	240	5	1.5	1	76
3	Night Cream	300	3	3.5	1	76
4	Foundation	700	4	3	1	77
5	compact Powder	400	3	3.5	1	77
6	Primer	300	5	2.5	1	77
7	Nail paint	200	4	3	1	78
8	Nail oil	150	5	2	1	78
9	Hair oil	300	4	2.5	1	79
10	Shampoo	500	4	2.5	1	79
11	Hair Serum	400	5	1.5	1	79
12	Lipstick	250	5	1.5	1	80
13	Lip liner	150	4	1.5	1	80
14	Lip gloss	200	4	1	1	80
15	Concealer	400	5	3.5	2	81

.....so on

Show the table structure of Order_table:-

Query:

SELECT * FROM order_table;

order_id	quantity	salesman_id	product_id	order_date
2	4	3	12	2023-11-11
3	8	1	19	2023-11-23
4	2	6	24	2023-12-18
5	10	2	4	2023-12-26
6	12	8	2	2024-01-10
7	6	5	26	2024-01-14
8	5	7	3	2024-01-18
9	16	4	12	2024-01-21
10	9	9	9	2024-01-28
11	20	4	30	2024-02-02
12	18	3	35	2024-02-05
13	9	9	9	2024-02-10
14	25	8	65	2024-02-14
15	14	5	68	2024-02-17
16	17	8	95	2024-02-18

.....so on

Questions:

1) Show the all salesman.

Query:

SELECT * FROM sales_man;

salesman_id	salesman_name	mobileno	emailid	city	designation	level
1	John Doe	1234567890	john.doe@email.cpm	New York	Sales Manager	1
2	Jane Smith	9876543210	jane.smith@email_Insert new	Angeles	Senior Sales Executive	2
3	Kartik Sharma	4567891234	kartik.sharma@gmail.com	India	Sales Executive	3
4	Anusha Bansal	2345678911	anusha.bansal@gmail.com	India	Sales Executive Trainee	4
5	Vaibhav Jindal	3456789123	vaibhav.jindal@gmail.com	India	Sales Executive	3
6	Nick Johns	6789123412	nick.johns@gmail.com	Australia	Sales Mangaer	1
7	Khushboo Garg	9876543215	khushboo.garg@gmail.com	India	Sales Executive Trainee	4
8	Dolly JIndal	7890123456	dolly.jindal@gmail.com	India	Senior Sales Executive	2
9	Sudhanshu Mishra	9876543217	sudhanshu.mishra@gmail.com	India	Sales Executive	3
10	Chirag Verma	9435672861	chirag.verma@gmail.com	India	Sales Manager	1

2) Show all brands.

Query:

SELECT * FROM brand;

brand_id	brand_name
1	Lakmi
2	Maybelline
3	Bata
4	Puma
5	Biba

3) Show all category with brand.

Query:

SELECT c.cat_id, c.cat_name, b.brand_name

FROM category as c

LEFT JOIN brand as b

ON c.brand_id=b.brand_id;

cat_id	cat_name	brand_name
76	Skin care	Lakmi
77	Makeup	Lakmi
78	Nail care	Lakmi
79	Hair care	Lakmi
80	Lip care	Lakmi
81	Face makeup	Maybelline
82	Eye makeup	Maybelline
83	Lip products	Maybelline
84	Skin care	Maybelline
85	Nail care	Maybelline
86	Casual Foot	Bata
87	Formal Foot	Bata
88	Athletic and	Bata
89	Sandals and	Bata
90	Accessories	Bata

.....so on

4) Show all product with brand and category.

Query:

SELECT p.product_id, p.product_name, b.brand_name, c.cat_name

FROM product as p

LEFT JOIN brand as b

ON p.brand_id=b.brand_id

LEFT JOIN category as c

ON p.cat_id=c.cat_id;

product_id	product_name	brand_name	cat_name
1	Sunscream	Lakmi	Skin care
2	Moisturizer	Lakmi	Skin care
3	Night Cream	Lakmi	Skin care
4	Foundation	Lakmi	Makeup
5	compact Powder	Lakmi	Makeup
6	Primer	Lakmi	Makeup
7	Nail paint	Lakmi	Nail care
8	Nail oil	Lakmi	Nail care
9	Hair oil	Lakmi	Hair care
10	Shampoo	Lakmi	Hair care
11	Hair Serum	Shampoo	Hair care
12	Lipstick	Lakmi	Lip care
13	Lip liner	Lakmi	Lip care
14	Lip gloss	Lakmi	Lip care
15	Concealer	Maybelline	Face ma

.....so on

5) Show the number of product for each brand.

Query:

SELECT b.brand_name,count(p.product_id) as total_product FROM product as p
join brand as b on p.brand_id=b.brand_id

group by b.brand_id;

brand_name	total_product
Lakmi	28
Maybelline	30
Bata	30
Puma	30
Biba	28

6) Show the number of product for each brand and category.

Query:

SELECT b.brand_name, c.cat_name, count(p.product_id) as total_product

FROM product as p

LEFT JOIN brand as b

ON p.brand_id=b.brand_id

LEFT JOIN category as c

ON p.cat_id=c.cat_id

GROUP BY b.brand_id, c.cat_id;

brand_name	cat_name	total_product
Lakmi	Skin care	6
Lakmi	Makeup	6
Lakmi	Nail care	4
Lakmi	Hair care	6
Lakmi	Lip care	6
Maybelline	Face makeup	6
Maybelline	Eye makeup	6
Maybelline	Lip products	6
Maybelline	Skin care	6
Maybelline	Nail care	6
Bata	Casual Foot	6
Bata	Formal Foot	6
Bata	Athletic and	6
Bata	Sandals and	6
Bata	Accessories	6

7) Show the order each salesman with product name brand and category and order amount as well.

Query:

SELECT o.order_id, s.salesman_name, p.product_name,

b.brand_name, c.cat_name,(p.price*o.quantity) as order_amount

FROM order_table as o

JOIN sales_man as s ON o.salesman_id=s.salesman_id

JOIN product as p ON o.product_id=p.product_id

JOIN brand as b ON p.brand_id-b.brand_id

JOIN category as c ON p.cat_id=c.cat_id

order by s.salesman_id ASC;

order_id	salesman_name	product_name	brand_name	cat_name	order_amount
3	John Doe	Eyeliner	Biba	Eye makeup	2800
3	John Doe	Eyeliner	Puma	Eye makeup	2800
3	John Doe	Eyeliner	Bata	Eye makeup	2800
3	John Doe	Eyeliner	Lakmi	Eye makeup	2800
18	John Doe	Eyeliner	Biba	Eye makeup	2800
18	John Doe	Eyeliner	Puma	Eye makeup	2800
18	John Doe	Eyeliner	Bata	Eye makeup	2800
18	John Doe	Eyeliner	Lakmi	Eye makeup	2800
5	Jane Smith	Foundation	Biba	Makeup	7000
5	Jane Smith	Foundation	Puma	Makeup	7000
5	Jane Smith	F Foundation	Bata	Makeup	7000
5	Jane Smith	Foundation	Maybelline	Makeup	7000
20	Jane Smith	Foundation	Biba	Makeup	7000
20	Jane Smith	Foundation	Puma	Makeup	7000
20	Jane Smith	Foundation	Bata	Makeup	7000

8) Show the number of order for each salesman with brand.

Query:

SELECT s.salesman_id, s.salesman_name, b.brand_name, COUNT(o.order_id) as order_total

FROM order_table as o

JOIN sales_man as s

ON o.salesman_id=s.salesman_id

JOIN product as p

ON o.product_id=p.product_id

JOIN brand as b

ON p.brand_id=b.brand_id

GROUP BY s.salesman_id, b.brand_id;

salesman_id	salesman_name	brand_name	order_total
3	Kartik Sharma	Lakmi	2
1	John Doe	Maybelline	2
6	Nick Johns	Maybelline	2
2	Jane Smith	Lakmi	2
8	Dolly JIndal	Lakmi	3
5	Vaibhav Jindal	Maybelline	2
7	Khushboo Garg	Lakmi	2
4	Anusha Bansal	Lakmi	3
9	Sudhanshu Mishra	Lakmi	4
4	Anusha Bansal	Bata	3
3	Kartik Sharma	Bata	3
8	Dolly JIndal	Biba	3
5	Vaibhav Jindal	Biba	2
8	Dolly JIndal	Maybelline	2

9) Show the number of order for each salesman with brand and category.

Query:

SELECT s.salesman_id, s.salesman_name,

b.brand_name, c.cat_name, COUNT(o.order_id) as total_order

FROM order_table as o

JOIN sales_man as s ON o.salesman_id=s.salesman_id

JOIN product as p ON o.product_id=p.product_id

JOIN brand as b ON p.brand_id-b.brand_id

JOIN category as c ON p.cat_id=c.cat_id

GROUP BY s.salesman_id, b.brand_id, c.cat_id;

salesman_id	salesman_name	brand_name	cat_name	total_order
3	Kartik Sharma	Biba	Lip care	2
3	Kartik Sharma	Puma	Lip care	2
3	Kartik Sharma	Bata	Lip care	2
3	Kartik Sharma	Maybelline	Lip care	2
1	John Doe	Biba	Eye makeup	2
1	John Doe	Puma	Eye makeup	2
1	John Doe	Bata	Eye makeup	2
1	John Doe	Lakmi	Eye makeup	2
6	Nick Johns	Biba	Skin care	2
6	Nick Johns	Puma	Skin care	2
6	Nick Johns	Bata	Skin care	2
6	Nick Johns	Lakmi	Skin care	2
2	Jane Smith	Biba	Makeup	2
2	Jane Smith	Puma	Makeup	2
2	Jane Smith	Bata	Makeup	2

10) Show the total order amount for each salesman with sold order quantity and product name.

Query:

SELECT s.salesman_id, s.salesman_name, p.product_name,

Sum(o.quantity*p.price) as total_order_amount, sum(o.quantity) as quantity

FROM order_table as o

JOIN sales_man as s ON o.salesman_id=s.salesman_id

JOIN product as p ON o.product_id=p.product_id

GROUP BY s.salesman_id, p.product_id;

salesman_id	salesman_name	product_name	total_order_amount	quantity
3	Kartik Sharma	Lipstick	2000	8
1	John Doe	Eyeliner	5600	16
6	Nick Johns	Face & Neck Cream	1800	4
2	Jane Smith	Foundation	14000	20
8	Dolly JIndal	Moisturizer	8640	36
5	Vaibhav Jindal	Cleansing Water	3600	12
7	Khushboo Garg	Night Cream	3000	10
4	Anusha Bansal	Lipstick	12000	48
9	Sudhanshu Mishra	Hair oil	10800	36
4	Anusha Bansal	Sneakers	60000	60
3	Kartik Sharma	Men Formal Derb	86400	54
8	Dolly JIndal	Women Phulkari	75000	75
5	Vaibhav Jindal	Women Straight	56000	28
8	Dolly JIndal	Liquid Lipstick	13600	34

11) Show the total order amount for each salesman and brand.

Query:

SELECT s.salesman_id, s.salesman_name, b.brand_name, sum(p.price*o.quantity) as total_order_amount

FROM sales_man as s

JOIN order_table as o ON s.salesman_id=o.salesman_id

JOIN product as p ON o.product_id=p.product_id

JOIN brand as b ON p.brand_id=b.brand_id

GROUP BY s.salesman_id, b.brand_id;

salesman_id	salesman_name	brand_name	total_order_amount
3	Kartik Sharma	Lakmi	2000
1	John Doe	Maybelline	5600
6	Nick Johns	Maybelline	1800
2	Jane Smith	Lakmi	14000
8	Dolly JIndal	Lakmi	8640
5	Vaibhav Jindal	Maybelline	3600
7	Khushboo Garg	Lakmi	3000
4	Anusha Bansal	Lakmi	12000
9	Sudhanshu Mishra	Lakmi	10800
4	Anusha Bansal	Bata	60000
3	Kartik Sharma	Bata	86400
8	Dolly JIndal	Biba	75000
5	Vaibhav Jindal	Biba	56000
8	Dolly JIndal	Maybelline	13600

12) Show all order accordingly to most popular brands.

Query:

SELECT b.brand_name, SUM(o.quantity) as quantity

FROM order_table as o

JOIN product as p ON o.product_id=p.product_id

JOIN brand as b ON p.brand_id=b.brand_id

GROUP BY b.brand_id

ORDER BY SUM(quantity) DESC;

brand_name	quantity
Lakmi	158
Bata	114
Biba	103
Maybelline	66

In conclusion, the Sales Performance Analysis project has equipped us with actionable insights and strategic recommendations to propel our sales team to

new heights. As we embark on the implementation phase, we remain committed to data-driven decision-making and a culture of continuous improvement.