SQL Case Study 3: Texture Tales

INTRODUCTION

Texture Tales Clothing Company prides themselves on providing an optimized range of clothing and lifestyle wear for the modern adventurer!

I, the CEO of this trendy fashion company is asking you to assist the team's merchandising teams analyze their sales performance and generate a basic financial report to share with the wider business.

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LINK

SCHEMA USED

product_details

product_id	varchar
price	int
product_name	varchar
category_id	int
segment_id	int
style_id	int
category_name	varchar
segment_name	varchar
style_name	varchar

sales

prod_id	varchar
qty	int
price	int
discount	int
member	varchar
txn_id	varchar
start_txn_time	varchar

product_prices

id	int
product_id	varchar
price	int

Product_hierarchy

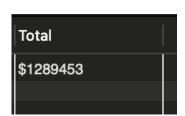|	
id	int
product_id	int
price	int
start_date	date
end_date	date

CASE STUDY QUESTIONS

1. **What was the total quantity sold for all products?**

   select details.product_name as product , sum(qty) as qty
   from product_details as details inner join sales
   on details.product_id = sales.prod_id
   group by product order by qty desc;

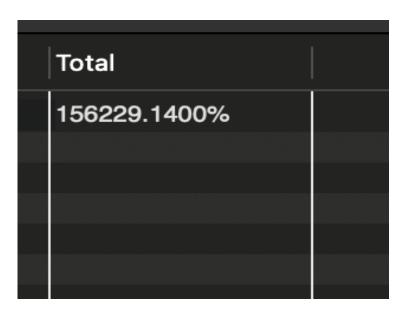 | product | qty |
   |---------|-----|
   | Grey Fashion Jacket - Womens | 3876 |
   | Navy Oversized Jeans - Womens | 3856 |
   | Blue Polo Shirt - Mens | 3819 |
   | White Tee Shirt - Mens | 3800 |
   | Navy Solid Socks - Mens | 3792 |
   | Black Straight Jeans - Womens | 3786 |
   | Pink Fluro Polkadot Socks - Mens | 3770 |
   | Indigo Rain Jacket - Womens | 3757 |
   | Khaki Suit Jacket - Womens | 3752 |
   | Cream Relaxed Jeans - Womens | 3707 |
   | White Striped Socks - Mens | 3655 |
   | Teal Button Up Shirt - Mens | 3646 |

2. **What is the total generated revenue for all products before discounts?**

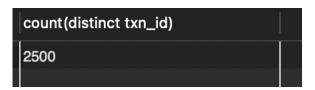   select concat('$',sum(qty * price)) as Total from sales ;

Total
$1289453

3. What was the total discount amount for all products?

```
select concat(sum(price*qty*discount)/100,'%') as Total from sales;
```
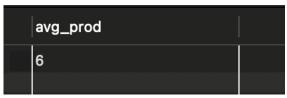
Total
156229.1400%

4. How many unique transactions were there?

```
select count(distinct txn_id) from sales;
```

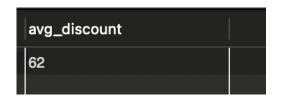| count(distinct txn_id) |
| --- |
| 2500 |

5. What are the average unique products purchased in each transaction?

```
with cte_trans as
(
select t.txn_id , count(distinct p.product_name) as
counts
from sales t inner join product_details p
on p.product_id = t.prod_id
group by t.txn_id
)
select round(avg(counts)) as avg_prod from cte_trans;
```

avg_prod	
6	

6. What is the average discount value per transaction?

```
with cte_discount as
(
        select txn_id, sum(discount * qty * price)/100 as discount
        from sales group by txn_id
)
select round(avg(discount)) as avg_discount from cte_discount;
```

avg_discount	
62	

7. What is the average revenue for member transactions and non- member transactions?

```
with cte_revenue as
(
        select member ,txn_id, sum(qty*price) as revenue from
        sales group by member,txn_id
)
 select member, round(avg(revenue)) as avg_revenue from
cte_revenue group by member;
```

member	avg_revenue	
true	516	
false	515	

8. What are the top 3 products by total revenue before discount?

```
select p.product_name,sum(s.qty*s.price) as revenue  from
product_details p inner join sales s
on p.product_id = s.prod_id
group by p.product_name
order by revenue desc
```

product_name	revenue	
Blue Polo Shirt - Mens	217683	
Grey Fashion Jacket - Womens	209304	
White Tee Shirt - Mens	152000	

9. What are the total quantity, revenue and discount for each segment?

select p.segment_id,p.segment_name, sum(s.qty*s.price) as revenue ,
sum(s.qty*s.price*s.discount)/100 as discount
 from sales s inner join product_details p
 on p.product_id = s.prod_id
 group by p.segment_name, p.segment_id;

segment_id	segment_name	revenue	discount	
3	Jeans	208350	25343.9700	
5	Shirt	406143	49594.2700	
6	Socks	307977	37013.4400	
4	Jacket	366983	44277.4600	

10. What is the top selling product for each segment?

select p.product_id,p.style_id,p.segment_name,p.product_name ,
sum(s.qty) as qty
 from product_details p inner join sales s
 on p.product_id=s.prod_id
group by p.segment_name,p.product_name,
p.product_id,p.style_id;

product_id	style_id	segment_name	product_name	qty
c4a632	7	Jeans	Navy Oversized Jeans - Womens	3856
5d267b	13	Shirt	White Tee Shirt - Mens	3800
b9a74d	17	Socks	White Striped Socks - Mens	3655
2feb6b	18	Socks	Pink Fluro Polkadot Socks - Mens	3770
e31d39	9	Jeans	Cream Relaxed Jeans - Womens	3707
72f5d4	11	Jacket	Indigo Rain Jacket - Womens	3757
2a2353	15	Shirt	Blue Polo Shirt - Mens	3819
f084eb	16	Socks	Navy Solid Socks - Mens	3792
e83aa3	8	Jeans	Black Straight Jeans - Womens	3786
d5e9a6	10	Jacket	Khaki Suit Jacket - Womens	3752
9ec847	12	Jacket	Grey Fashion Jacket - Womens	3876
c8d436	14	Shirt	Teal Button Up Shirt - Mens	3646

11. What are the total quantity, revenue and discount for each category?

**select p.category_name,sum(s.qty) as qty , sum(s.qty*s.price) as revenue , sum(s.qty*s.price*s.discount)/100 as discount
 from product_details p inner join sales s
 on p.product_id = s.prod_id
 group by p.category_name;**

category_name	qty	revenue	discount
Womens	22734	575333	69621.4300
Mens	22482	714120	86607.7100

12. What is the top selling product for each category?

**select p.category_name,p.product_name,sum(s.qty) as qty
 from sales s inner join product_details p
 on p.product_id=s.prod_id
 group by p.category_name,p.product_name
 order by qty desc
 limit 5;**

category_name	product_name	qty
Womens	Grey Fashion Jacket - Womens	3876
Womens	Navy Oversized Jeans - Womens	3856
Mens	Blue Polo Shirt - Mens	3819
Mens	White Tee Shirt - Mens	3800
Mens	Navy Solid Socks - Mens	3792