Making Dashboard using SQL and Excel

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Table of contents

01

Data Understanding

Data Understanding

1. Data yang digunakan telah tersedia. Bisa diakses pada tautan berikut. **Klik Link**

2. Pada data yang digunakan , terdiri dari 3 tabel yaitu tabel product, customer, dan order.

3. Setiap tabel memiliki jumlah kolom dan baris yang berbeda. :

- Tabel Customer berisi 794 rows (termasuk label data) dan 8 kolom (customer id, customer name, segment, country, state, postal code, region, city).

- Tabel product berisi 1863 rows (termasuk label data) dan 4 kolom (product id, category,product name, sub category).

- Tabel Order berisi 5010 rows (termasuk label data) dan 10 kolom (order id, customer id, product id, order date, ship date,ship mode, sales, quantity, profit, discount).
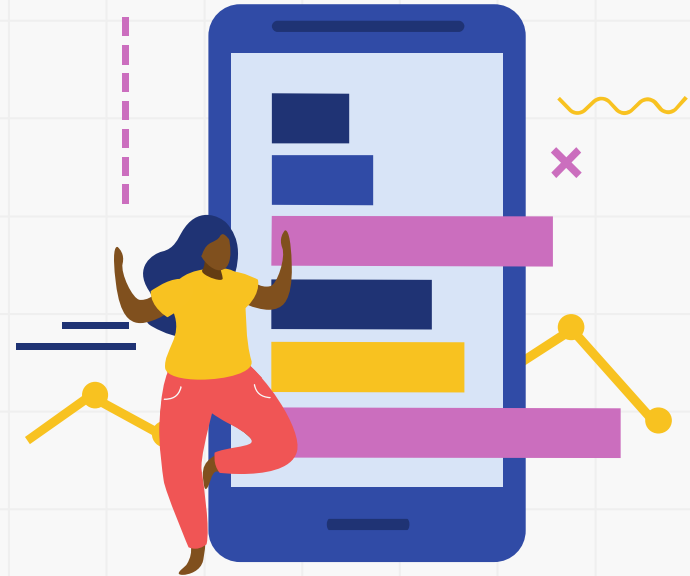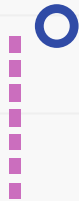
02

SQL Query

Query yang digunakan untuk mengambil data dari database.
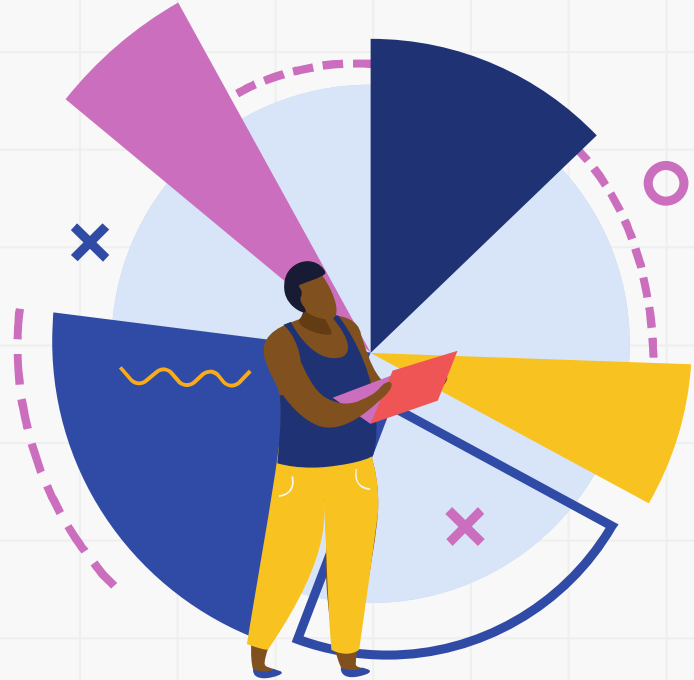
```sql
select * from project_customers;

select * from project_orders;

select * from project_products;


create table combined_table_indah as
    select c.customer_id ,p.product_id ,o.order_id,
            c.customer_name, c.segment ,c.country, c.state ,c.postal_code, c.region, c.city,
            o.order_date ,o.ship_date,o.ship_mode ,o.sales ,o.quantity ,o.profit,o.discount,
            p.category,p.product_name ,p.sub_category
        FROM project_customers c
            INNER JOIN project_orders o ON c.customer_id = o.customer_id
            INNER JOIN project_products p ON o.product_id = p.product_id;

select * from combined_table_indah;

select sum(sales) as total_sales from combined_table_indah;

select sum(quantity) as total_product_sold from combined_table_indah;

select sum(profit) as total_profit from combined_table_indah;

select count(distinct order_id) as total_order from combined_table_indah;

select count(distinct product_name) as total_jenis_produk from combined_table_indah;

select count(distinct country) as total_order from combined_table_indah;

select count(distinct customer_id) as total_customer from combined_table_indah;
```
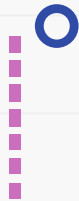
```sql
--daily trend

select extract(ISODOW from order_date) as order_day , count(distinct order_id)as total_orders
from combined_table_indah
group by extract(ISODOW from order_date)
order by total_orders desc;

--monthly trend

select extract(month from order_date) as order_month , count(distinct order_id)as total_orders
from combined_table_indah
group by extract(month from order_date)
order by total_orders desc;

--total shipping
select extract(ISODOw from ship_date) as shipping_day , count(distinct order_id)as total_orders
from combined_table_indah
group by extract(ISODOW from ship_date)
order by total_orders desc;


--sales by category
select category , cast(sum(sales)as decimal(10,2)) as total_revenue ,
        cast(sum(sales)*100/(select sum(sales) from combined_table_indah) as decimal(10,2))as pct
    from combined_table_indah
    group by category;

--total order by category
select category, count(distinct order_id)as total_orders ,
        cast(count(distinct order_id)*100/(select count(distinct order_id) from combined_table_indah) as
decimal(10,2))as pct
    from combined_table_indah
    group by category;

--top 5 best seller sub_category

select sub_category, sum(quantity) as total_product_sold
from combined_table_indah
group by sub_category
order by total_product_sold desc
limit 5
```
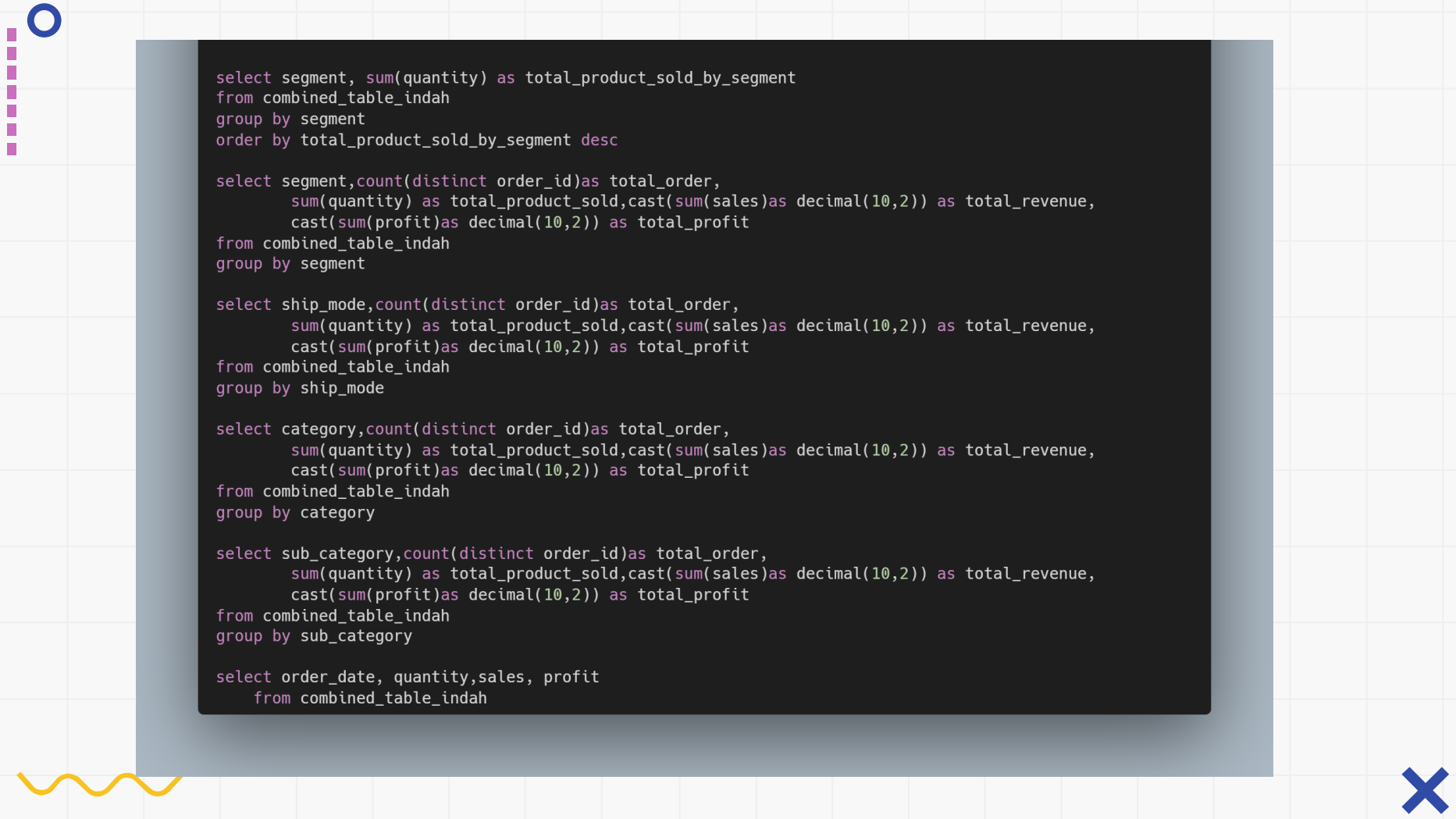
```sql
select segment, sum(quantity) as total_product_sold_by_segment
from combined_table_indah
group by segment
order by total_product_sold_by_segment desc

select segment,count(distinct order_id)as total_order,
       sum(quantity) as total_product_sold,cast(sum(sales)as decimal(10,2)) as total_revenue,
       cast(sum(profit)as decimal(10,2)) as total_profit
from combined_table_indah
group by segment

select ship_mode,count(distinct order_id)as total_order,
       sum(quantity) as total_product_sold,cast(sum(sales)as decimal(10,2)) as total_revenue,
       cast(sum(profit)as decimal(10,2)) as total_profit
from combined_table_indah
group by ship_mode

select category,count(distinct order_id)as total_order,
       sum(quantity) as total_product_sold,cast(sum(sales)as decimal(10,2)) as total_revenue,
       cast(sum(profit)as decimal(10,2)) as total_profit
from combined_table_indah
group by category

select sub_category,count(distinct order_id)as total_order,
       sum(quantity) as total_product_sold,cast(sum(sales)as decimal(10,2)) as total_revenue,
       cast(sum(profit)as decimal(10,2)) as total_profit
from combined_table_indah
group by sub_category

select order_date, quantity,sales, profit
    from combined_table_indah
```
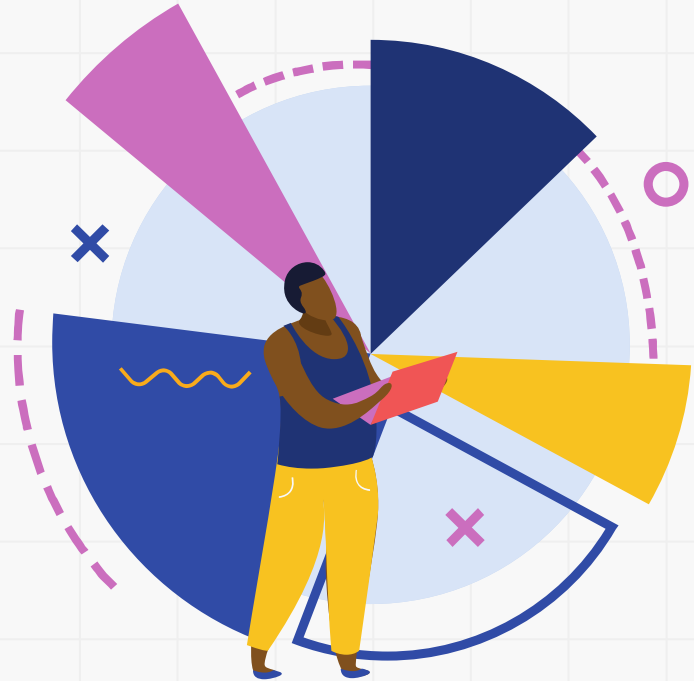
02

Excel Dashboard

DASHBOARD Sales Analysis
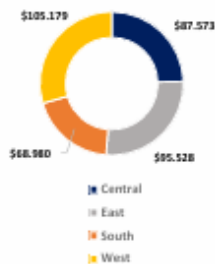
2014
2015
2016
2017

Central
East
South
West

Jumlah Sales

$105.179
$87.573
$68.980
$85.528

- Central
- East
- South
- West

% Sales by Category

33,96%
34,61%
31,43%

- Furniture
- Office Supplies
- Technology
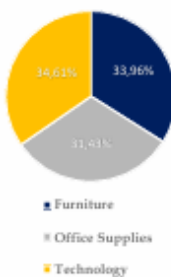
Jumlah Sales
$ 1.099.862

Jumlah Profit
$ 132.516

Jumlah Transaksi
5.009

Jumlah Produk Terjual
19.044

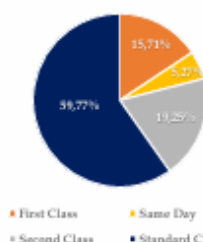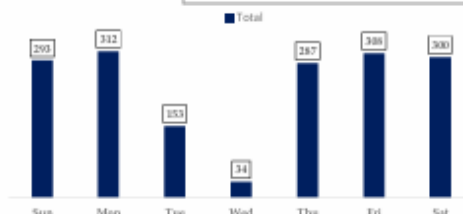## Top 5 Sales by sub-category

Phones	$12.930
Copiers	$12.280
Binders	$11.938
Storage	$10.287
Tables	$10.124

Top 5 Sales by State

California	$219.762
New York	$133.251
Texas	$91.480
Pennsylvania	$67.741
Washington	$61.842

% Sales by Segment

22,56%
43,97%
31,47%

- Home Office
- Corporate
- Consumer

% Total Order by Ship mode

15,71%
5,25%
59,77%
19,25%

- First Class
- Second Class
- Same Day
- Standard Class

Daily Volume

2014 2015 2016 2017

- Total

Sun	Mon	Tue	Wed	Thu	Fri	Sat
293	312	153	34	287	308	300

Jumlah Sales & Profit

2017	$14.559	$86.528
2016	$12.628	$85.411
2015	$6.480	$55.822
2014	$5.673	$54.743
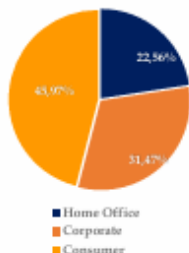
- Sum of sales
- Sum of profit
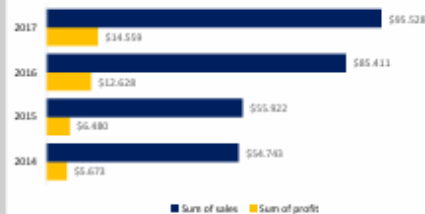
Monthly Volume Shipment

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
78	57	109	111	122	129	113	112	226	149	252	229

Monthly Volume Order

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
$69	$53	$118	$116	$118	$133	$111	$111	$226	$147	$261	$224

Thanks!

Do you have any questions?

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