



# Analyzing eCommerce Business Performance with SQL





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our office

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[Download  
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A series of hexagonal icons in various shades of blue and cyan are arranged along the left edge of the slide. The icons include a lightbulb, a thumbs-up, a network node, a smartphone, a magnifying glass, a gear, and a speech bubble.

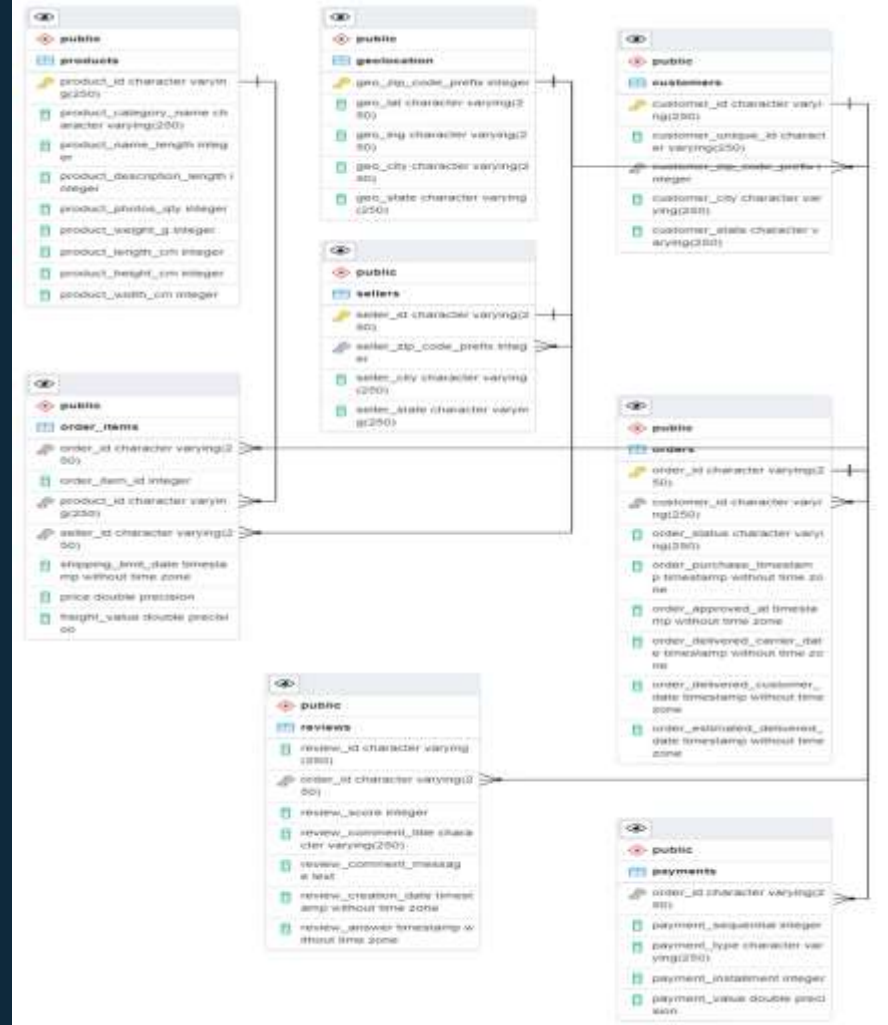
1

# Data Preparation

- Create 8 new table and columns using CREATE statement with the following dataset in csv file. Make sure the data type matched.

- Import csv data to the database using COPY statement. Make sure dataset path (in local storage) must be complete until the file\_name.csv.
- Create ERD with determine the primary key and foreign key using ALTER TABLE statement.
- Save and download image ERD.

Lihat atau Download ERD [disini](#)  
Query selengkapnya dapat dilihat [disini](#)








A decorative graphic on the left side of the slide. It features a large central hexagon with a white number '2'. Surrounding this central hexagon are several smaller hexagons of varying shades of blue and teal. Some of these smaller hexagons contain white icons: a lightbulb, a thumbs-up, a smartphone, a magnifying glass, and a gear. There is also a network-like icon with three nodes and a speech bubble icon.

2

# Annual Customer Activity Growth Analysis



	year double precision 	average_mau numeric 	new_customers bigint 	repeat_customers bigint 	average_orders numeric 
1	2016	108.7	326	3	1.009
2	2017	3694.8	43708	1256	1.032
3	2018	5338.2	52062	1167	1.024

### Table:

Here are query result using table orders and customers.

Query selengkapnya dapat dilihat [disini](#)

## Interpretation:

- The growth of new customers and monthly active user (MAU) are increasing every year.
- Most of the customers only did a single purchase for 3 years. Moreover, the value of customers who did more than one purchase every year (repeat customers) are decreasing from 2017 to 2018.



Interactive visualization can be seen

A decorative graphic on the left side of the slide. It features a large central hexagon with a blue-to-teal gradient, containing the white number '3'. Surrounding this central hexagon are several smaller hexagons of varying shades of blue and teal. Some of these smaller hexagons contain white icons: a lightbulb, a thumbs-up, a smartphone, a magnifying glass, and a gear. There is also a network-like icon with a central node and radiating lines, and a speech bubble icon.

3

# Annual Product Category Quality Analysis





	year double precision 🔒	most_product_category_by_revenue character varying 🔒	product_category_revenue numeric 🔒	total_revenue numeric 🔒	most_canceled_product_category character varying 🔒	canceled_product_category bigint 🔒	total_canceled_order bigint 🔒
1	2016	furniture_decor	6899.35	46653.74	toys	3	26
2	2017	bed_bath_table	580949.20	6921535.24	sports_leisure	25	265
3	2018	health_beauty	866810.34	8451584.77	health_beauty	27	334

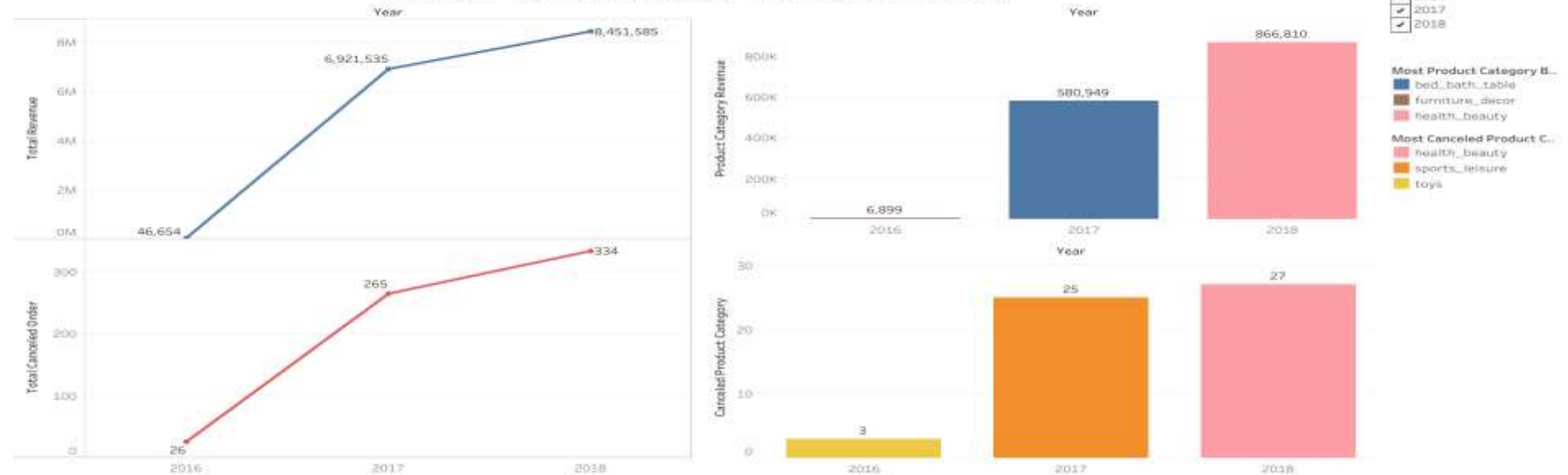
Table: Here are query result using table orders, order\_items, and product.



## Interpretation:

- Total company revenue keep increase each year with following by product category that always change.
- Health & beauty is a category that has the most revenue but also the most canceled order in 2018. This could be health beauty is the most dominated category in 2018.

### Annual Product Category Quality Dashboard








A decorative graphic on the left side of the slide. It features a large central hexagon with a white number '4'. Surrounding this central hexagon are several smaller hexagons of varying shades of blue and teal. Some of these smaller hexagons contain white icons: a lightbulb, a thumbs-up, a smartphone, a magnifying glass, and a gear. There is also a network-like icon with a central node and radiating lines, and a speech bubble icon.

4

# Analysis of Annual Payment Type Usage



Table: Here are query result using table order\_payments and orders

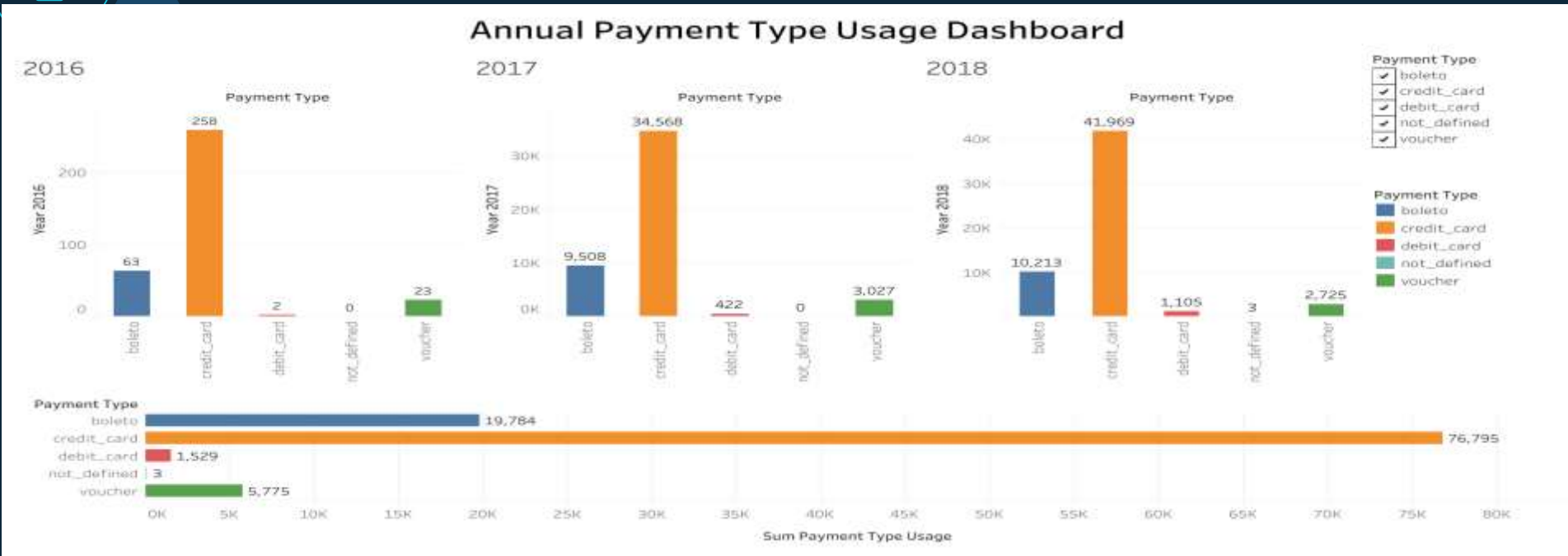
	payment_type  character varying	year_2016  numeric	year_2017  numeric	year_2018  numeric	sum_payment_type_usage  numeric
1	credit_card	258	34568	41969	76795
2	boleto	63	9508	10213	19784
3	voucher	23	3027	2725	5775
4	debit_card	2	422	1105	1529
5	not_defined	0	0	3	3

Query selengkapnya dapat dilihat [disini](#)



## Interpretation:

- Credit card is the most favorite payment type based on sum payment type usage.
- Voucher tend to be decrease from 2017 to 2018. Besides, debit card tend to be increase significantly more than 100% since 2016



Interactive visualization can be seen [here](#)



# Thanks!

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