





Created by:
Nur Cahyanti
nurcahyanti3152@gmail.com
https://www.linkedin.com/in/nur-cahyanti/
https://github.com/nrchyanti

"Bachelor of Mathematics from Bandung Institute of Technology who is interested in data field. Graduated from data science bootcamp with excellent grade predicate. Love to solve problems related to data analysis and data science using SQL, Python, and Tableau."

Supported by: Rakamin Academy Career Acceleration School www.rakamin.com

Overview



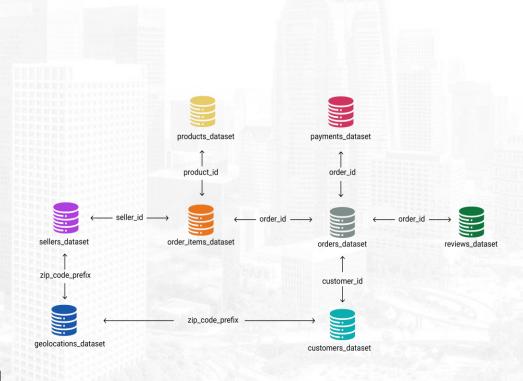
In a company, measuring business performance is very important to track, monitor, and assess the success or failure of various business processes. Therefore, this project will analyze business performance for an eCommerce company based on several business metrics, namely customer growth, product quality, and payment types.

Data Preparation



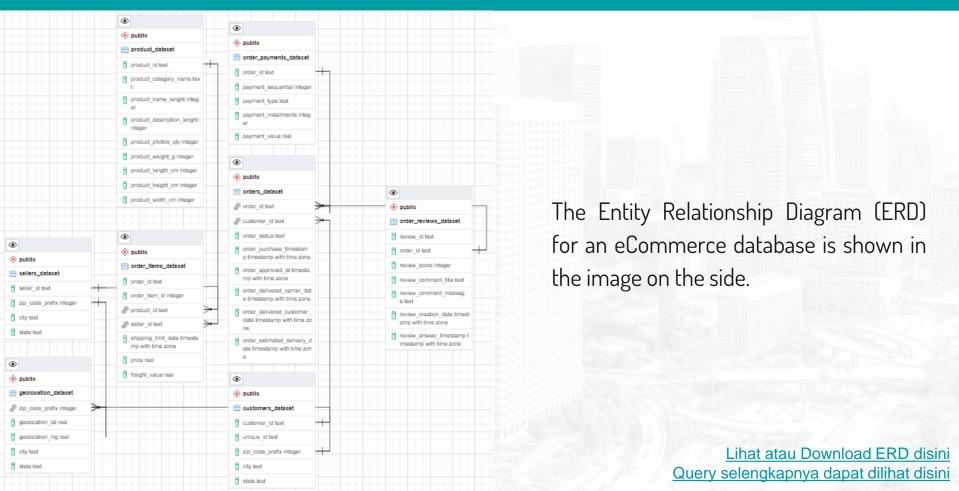
Data preprocessing stages:

- 1. Prepare raw data to be processed
- Create a new database according to the many tables that have been prepared
- 3. Make sure there are no errors in the input data type of each column
- 4. Importing data in csv format into database using PostgreSQL
- Creating an Entity Relationship Diagram (ERD)
- 6. Export the ERD in the form of an image and make sure the naming of the columns between the tables are related and the data types are correct



Data Preparation







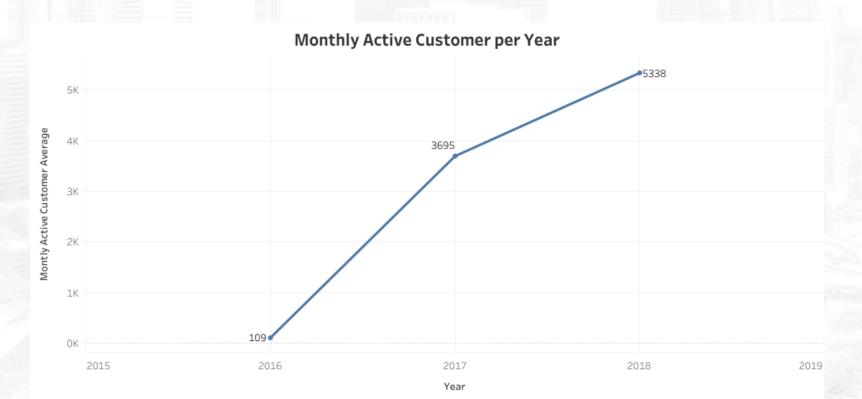
The following table shows the average monthly active customers, the number of new customers, the number of customers who make purchases more than once, and the average number of orders per customer. The data is divided annually.

year	monthly active customer average	new customer	customer with more than one transaction	average order per customer
2016	109	326	3	1.009
2017	3695	43708	1256	1.032
2018	5338	52062	1167	1.024

Each customer on average only makes 1 order per year.

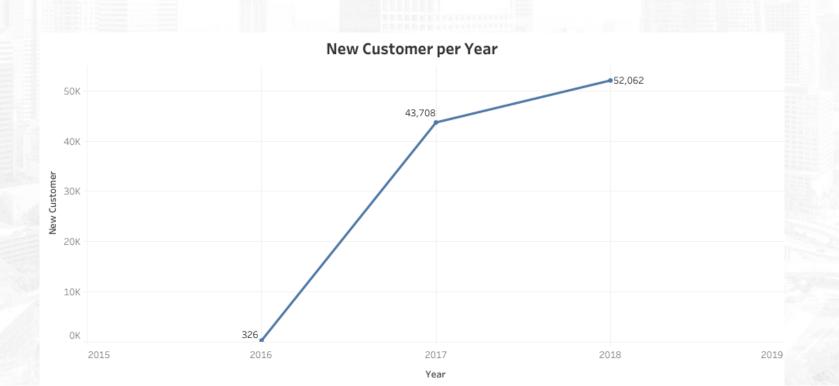


There is a significant increase in the average monthly active customer every year. This means that monthly active customers continue to grow well every year.





There are always new customers added every year. The most rapid increase occurred in 2016 to 2017.





The number of customers who made purchases more than once increased very rapidly in 2016 to 2017. However, there was a decline in 2017 to 2018. The marketing strategies implemented in 2016 can be reused for 2018 by evaluating the strategies implemented in 2017.





The following table shows data per year from total revenue, number of cancel orders, product category with the highest revenue, and product category with the most cancellations.

Year	Total revenue	Cancelled order	Category with highest revenue	Most canceled category
2016	46653.74	26	furniture_decor	toys
2017	6921535.24	265	bed_bath_table	sports_leisure
2018	8451584.77	334	health_beauty	health_beauty

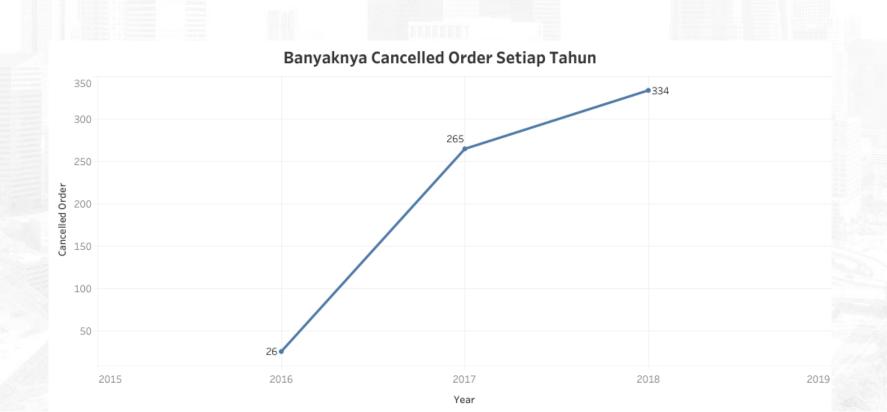


There is an increase in total revenue every year. Revenue increased the most from 2016 to 2017.

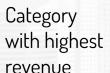




The number of canceled orders also increases every year.

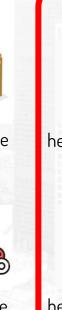








2016





Most canceled category







2017

sports_leisure

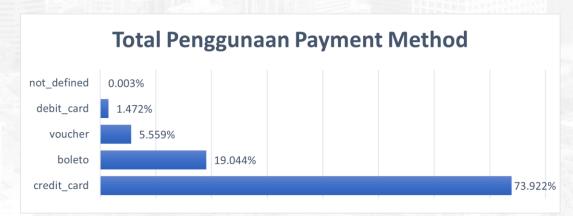
The product category with the highest revenue and the product category with the most cancellations can be seen in the image above. In 2018 the health_beauty category was the product with the highest revenue as well as the most cancellations.

Analysis of Annual Payment Type Usage



The following table shows the number of uses of various types of payments per year.

Payment type	Penggunaan tahun 2016	Penggunaan tahun 2017	Penggunaan tahun 2018
boleto	63	9508	10213
credit_card	258	34568	41969
debit_card	2	422	1105
not_defined	0	0	3
voucher	23	3027	2725



Credit cards are the most frequently used payment method. The frequency of use reaches about 74%.

Analysis of Annual Payment Type Usage



Every year, credit cards are always the most widely used payment method.

