Bank Muamalat Business Intelligence Analyst

**Project Based Internship Program**

Digital User Churn Dashboard

Presented by Radisha Fanni Sianti

About Me

"I am a fresh graduate of Master of Statistics and Bachelor of Mathematics from Institut Teknologi Sepuluh Nopember. I have a passion for continuing to learn and develop myself by constantly trying to broaden my knowledge in statistics and other related disciplines. I'm enthusiastic about deriving valuable insights from data and leveraging them to facilitate well-informed decision-making."
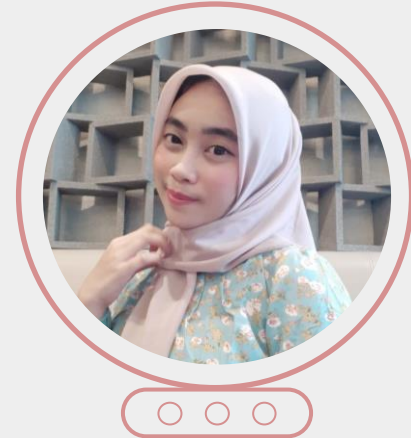
TABLE OF CONTENTS
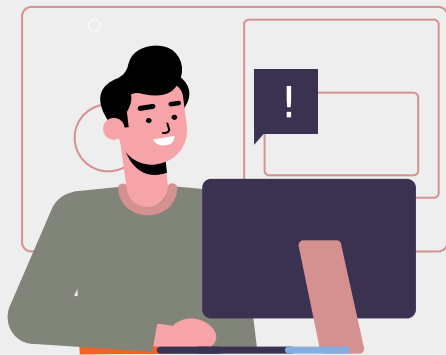
01. Primary Key in The Dataset

Dataset PT. Sejahtera Bersama

Customers Table
PK : CustomerID

Product Table
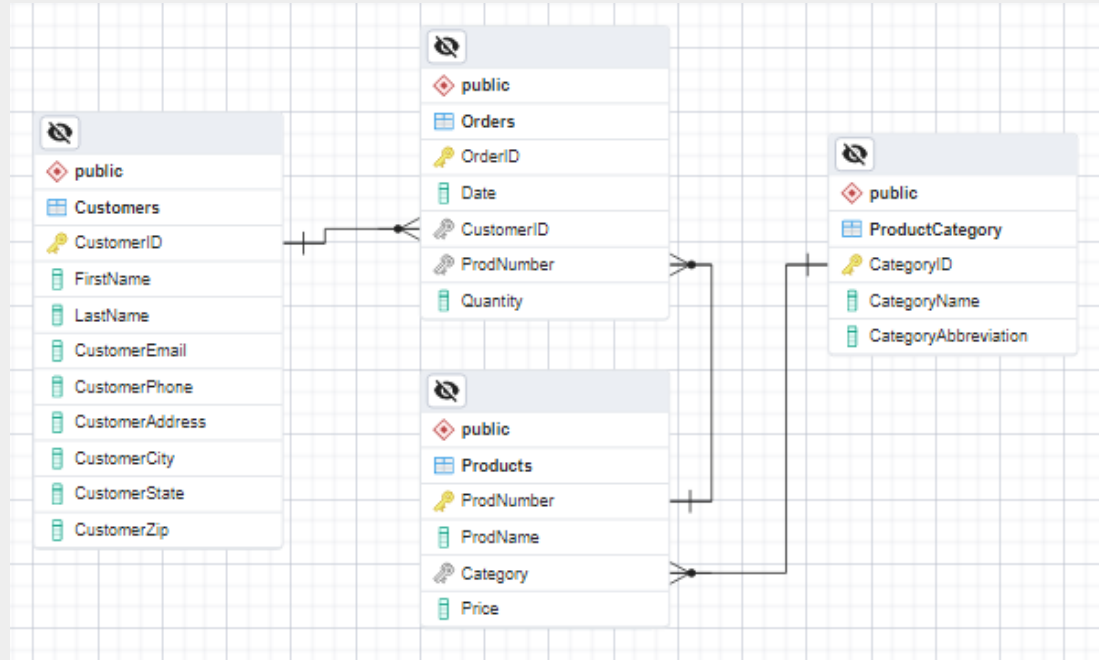PK : ProdNumber

Orders Table
PK : OrderID

ProductCartegory Table
PK : CategoryID

02. Relationship Between Dataset

ERD
(Entity Relationship Diagram)

03. Master Table

The master table is created according to predefined criteria. In forming the master table, the left join function combines several tables. The results of the formation of the master table can be seen as follows.

The Master Table

	order_date date	category_name character varying (100)	product_name character varying (100)	product_price numeric	order_qty numeric	total_sales numeric	cust_email character varying (100)	cust_city character varying (100)
1	2020-01-01	Drone Kits	BYOD-220	69	1	69	edew@nba.com#mailto:edew...	Honolulu
2	2020-01-01	eBooks	Polar Robots	23.99	2	47.98	fvaslerqt@comsenz.com#mail...	Jackson
3	2020-01-01	Robots	RWW-75 Robot	883	3	2649	tmckernot@tinyurl.com#mailt...	Katy
4	2020-01-01	eBooks	SCARA Robots	19.5	5	97.5	llespercx@com.com#mailto:ll...	Des Moines
5	2020-01-01	eBooks	Spherical Robots	16.75	5	83.75	lfromonte9@de.vu#mailto:lfro...	Birmingham
6	2020-01-01	Training Videos	Drone Video Techniques	37.99	6	227.94	gstiggersdd@eventbrite.com#...	Saint Petersburg
7	2020-01-02	Training Videos	Understanding Automa...	44.95	1	44.95	ksteershp@ameblo.jp#mailto:...	San Diego
8	2020-01-02	Blueprints	Ladybug Robot Blueprint	12	2	24	akingaby78@deviantart.com#...	West Palm Beach
9	2020-01-02	Robot Kits	BYOR-2640S	189	2	378	aguiongo@behance.net#mailt...	Houston
10	2020-01-02	Training Videos	Drone Video Techniques	37.99	2	75.98	lgatenbyel@quantcast.com#m...	Des Moines

04. Data Visualization

This is the sales visualization of PT. Sejahtera Bersama period 2020 until 2021

Total Sales	Total Quantity Sales	Total Order	Total Customer	Total Cities Ordered
1.75M	11.65K	3.34K	1.67K	361

Based on this visualization, a comparison can be made between 2020 and 2021 for several metric

Year	Total Sales	Total Quantity Sales	Total Order
2020	913.210,09	5971	1693
2021	841.540,48	5683	1646

There has been a decrease in the number of each metric from 2020 to 2021

04. Data Visualization

Number of customers who made orders can be seen in the following table

|	Order 1 time	Order 2 times	Order 3 times	Order 4 times	Order 5 times	Order 6 times	Order 7 Times
Order Quantity	684	552	301	122	33	8	1
Percent	40,93%	33,03%	18,01%	7,30%	1,98	0,48%	0,06%

Customers who order once have the highest number compared to customers who have other order frequencies. In other words, the majority of customers in this dataset only place one order.

Continued Data Visualization
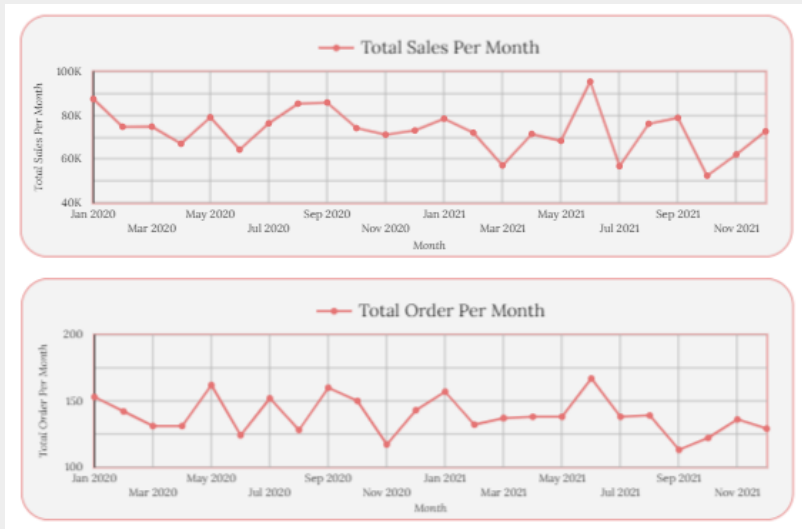
- The highest total sales and highest total orders occurred in June 2021.
- The lowest total sales and lowest total orders occurred in October 2021.
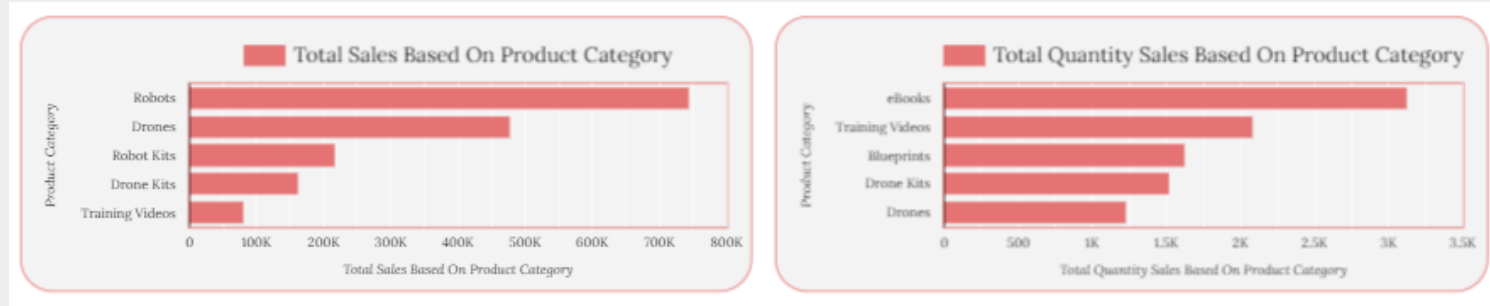
Continued Data Visualization

Customers who live in the cities of Washington and Houston contribute the highest total sales and total sales volume compared to other cities.
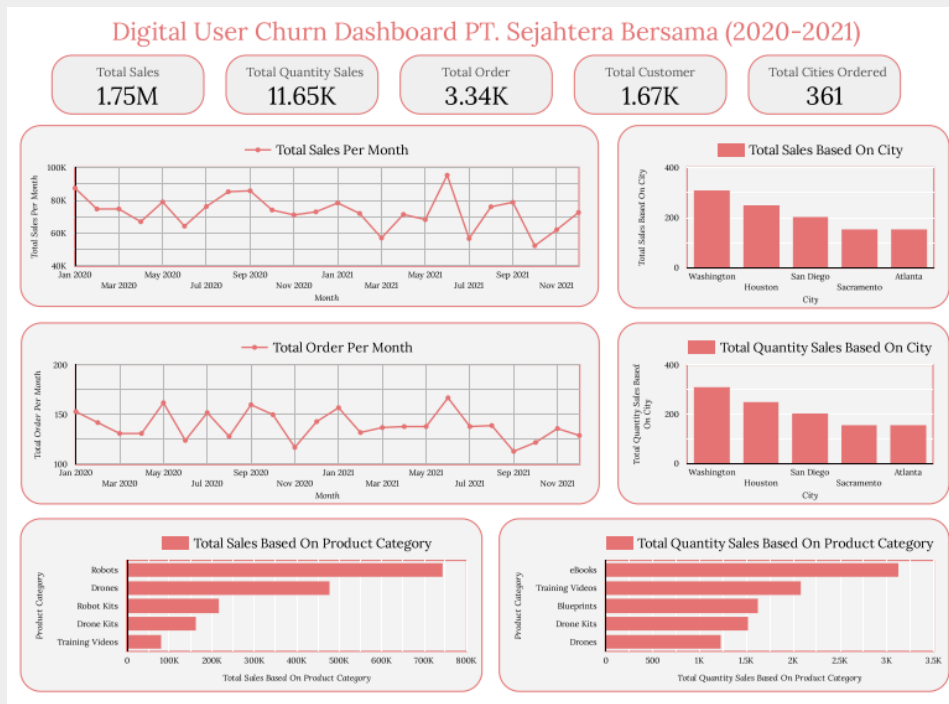
Continued Data Visualization

Based on the visualization, it can be seen that Product Category Drones and Drone Kits are included in the 5 product categories that have the highest total sales and the highest total sales quantity.

Continued Data Visualization

Dashboard →

Digital User Churn Dashboard PT. Sejahtera Bersama (2020-2021)

Total Sales	Total Quantity Sales	Total Order	Total Customer	Total Cities Ordered
1.75M	11.65K	3.34K	1.67K	361

05. Recomendations

01 Analysis of Causes of Decline and Evaluation of Products or Services

There has been a decrease in total sales, total sales quantity and total orders from 2020 to 2021. It is necessary to identify the causes of this decline and review the products or services of PT. Sejahtera Bersama to ensure that the quality and services provided are in accordance with customer expectations.

02 Perform Customer Segmentation

Customer segmentation is carried out to better understand customer needs, preferences and behavior to provide a more relevant experience to each customer group. Customer segmentation can be done based on churn behavior by dividing into three segments, namely the "Loyal Customers", "Churn Potential Customers", and "Churn Customers" segments.

03 Old Customer Reactivation

About 40% of customers made only one order in 2020-2021. This customer segment can be suspected of having the potential for churn. In this segment, it is possible to send more personal and relevant messages, for example, by providing relevant marketing campaigns to re-awaken customer interest.

Continued Recomendations

Retain Customers

04

The customer segmentation that lives in the cities of Washington and Houston provides the highest contribution to total sales and total quantity sales. In this segment, special offers or discounts can be given to be able to maintain this customer segment.

Product or service innovation

05

Maintaining product categories that contribute the most to total sales, namely Robots, Drones, Robot Kits, Drone Kits and Training Videos, and product categories that are purchased by many customers such as eBooks, Training Videos, Blueprints, Drone Kits and Drones. Based on this data, we can innovate a webinar activity or event related to that product category so that customers who take part in these activities are interested in placing an order. In other product categories, new developments and innovations can be carried out, and marketing campaigns can be conducted on products purchased in the least quantity by customers. For example, by providing special offers for buying a certain amount.

THANKS!