Business Intelligence Analyst Virtual Internship Program

Rakamin Academy **X** Bank Muamalat

Presented by

Radhimas Januar Rachman
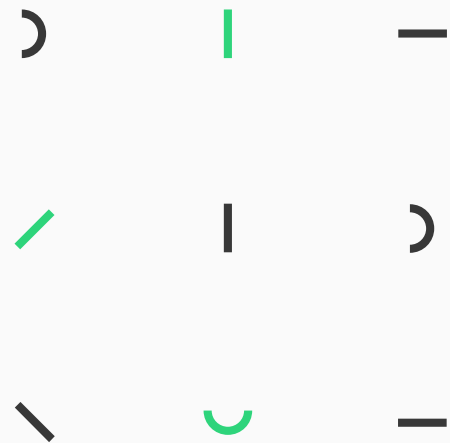
About me

Graduate Bachelor from Bina Nusantara University studying Industrial Engineering with an interest in the fields of Data science or Data analytics. Currently building experience and knowledge through bootcamps, projects, and internships.

Internship Experience

PT. Bank Muamalat x RakaminAcademy

Project-Based Intern : Business Intelligence Analyst
3 December 2023 - 01 January 2024

PT. HM SampoernaTbk

Secondary Processing Intern: 1 August 2021 - 31 January 2022

Education

Universitas Bina Nusantara

Bachelor of Industrial Engineering 2018 - 2022

Rakamin Academy

Data Science Bootcamp July 2023 - December 2023
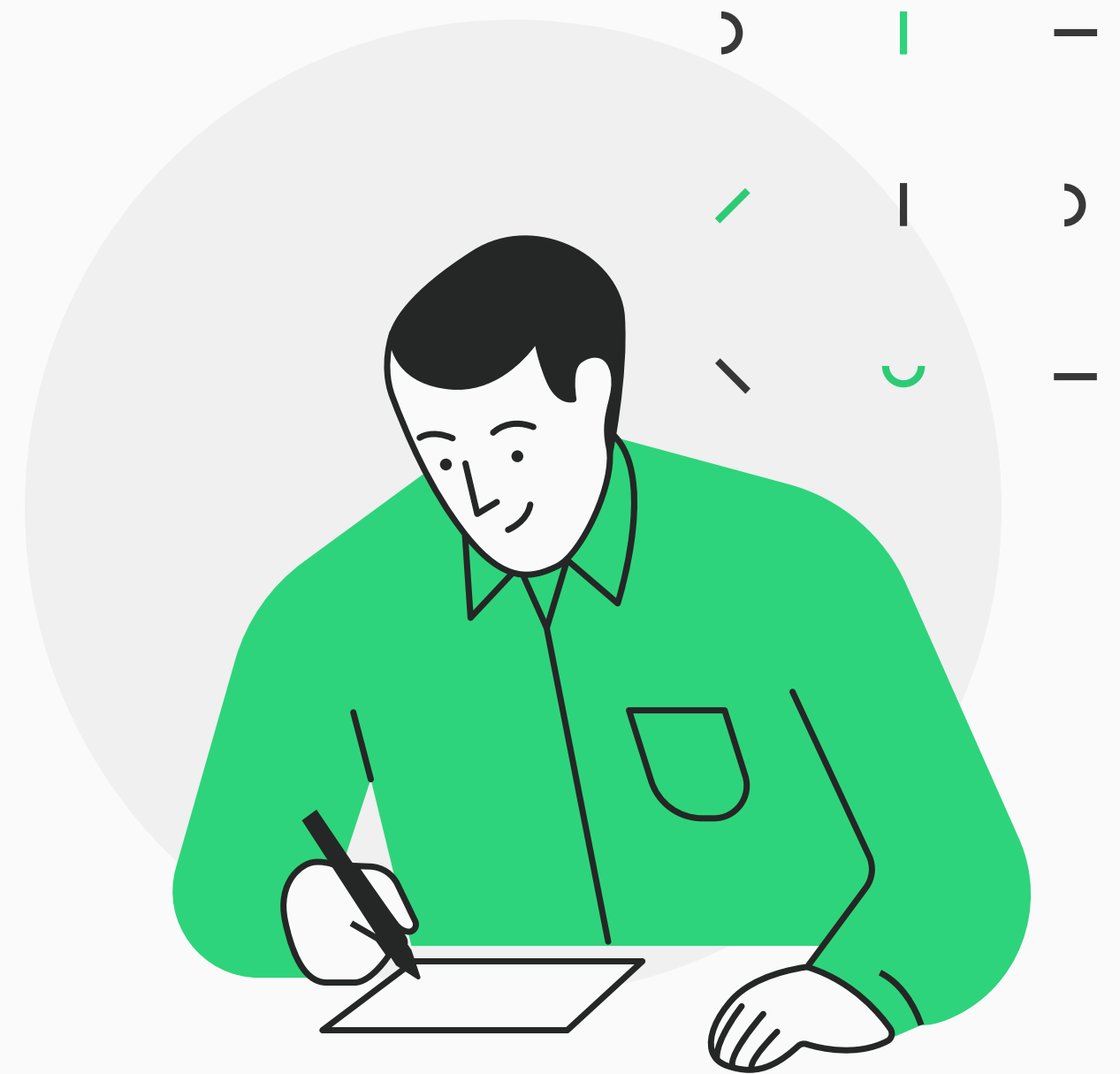
Tools

Excel

SQL

Looker Studio

Data Sources: https://bit.ly/47naTBM

Challenges

- **Primary key of the 4 tables**

- **Relationship of the 4 tables**

- **Create a master table**

- **Create a Dashboard**

- **Provide insights & Recommendation**

Data Sources: https://bit.ly/47naTBM

Result

Primary Key

Primary key table Customer: **CustomerID**

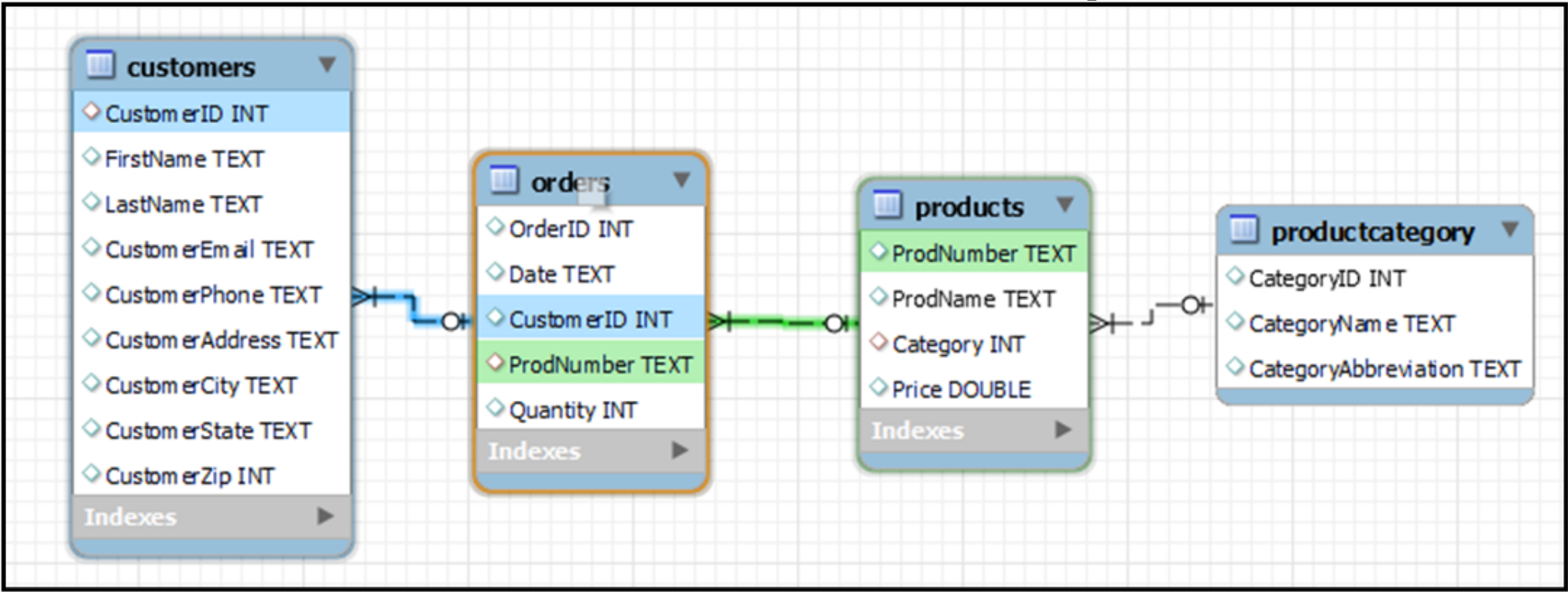Primary key table Products: **ProdNumber**

Primary key table orders: **OrderID**

Primary key table ProductCategory: **CategoryID**

Table Relationship

- **Customers.CustomerID=Orders.CustomerID** with a one to many relationship

- **Products.ProdNumber=Order.ProdNumber** with a one to many relationship

- **ProductCategory.CategoryID=Products.Categor**y with a one to many relationship

02

Result

Master Table

Row	order_date	category_name	product_name	product_price	order_qty	total_sales	cust_email	cust_city
1	2020-01-01	Drone Kits	BYOD-220	69.0	1	69.0	edew@nba.co...	Honolulu
2	2020-01-01	eBooks	Polar Robots	23.99	2	47.98	fvaslerqt@co...	Jackson
3	2020-01-01	Robots	RWW-75 Robot	883.0	3	2649.0	tmckernot@ti...	Katy

SCHEMAS

- classicmodels
- rakafood
- sys
- task5
  - Tables
  - Views
  - Stored Procedures
  - Functions
- task_week3

```sql
1   SELECT
2       o.Date as order_date,
3       pc.CategoryName as category_name,
4       p.ProdName as product_name,
5       p.Price as product_price,
6       o.Quantity as order_qty,
7       round(sum(o.Quantity * p.Price)) as total_sales,
8       c.CustomerEmail as cust_email,
9       c.CustomerCity as cust_city
10  FROM orders as o
11  JOIN customers as c on o.CustomerID = c.CustomerID
12  JOIN products as p on o.ProdNumber= p.ProdNumber
13  JOIN productcategory as pc on p.Category = pc.CategoryID
14  GROUP BY 1,2,3,4,5,7,8
15  ORDER BY 1 ASC;
```
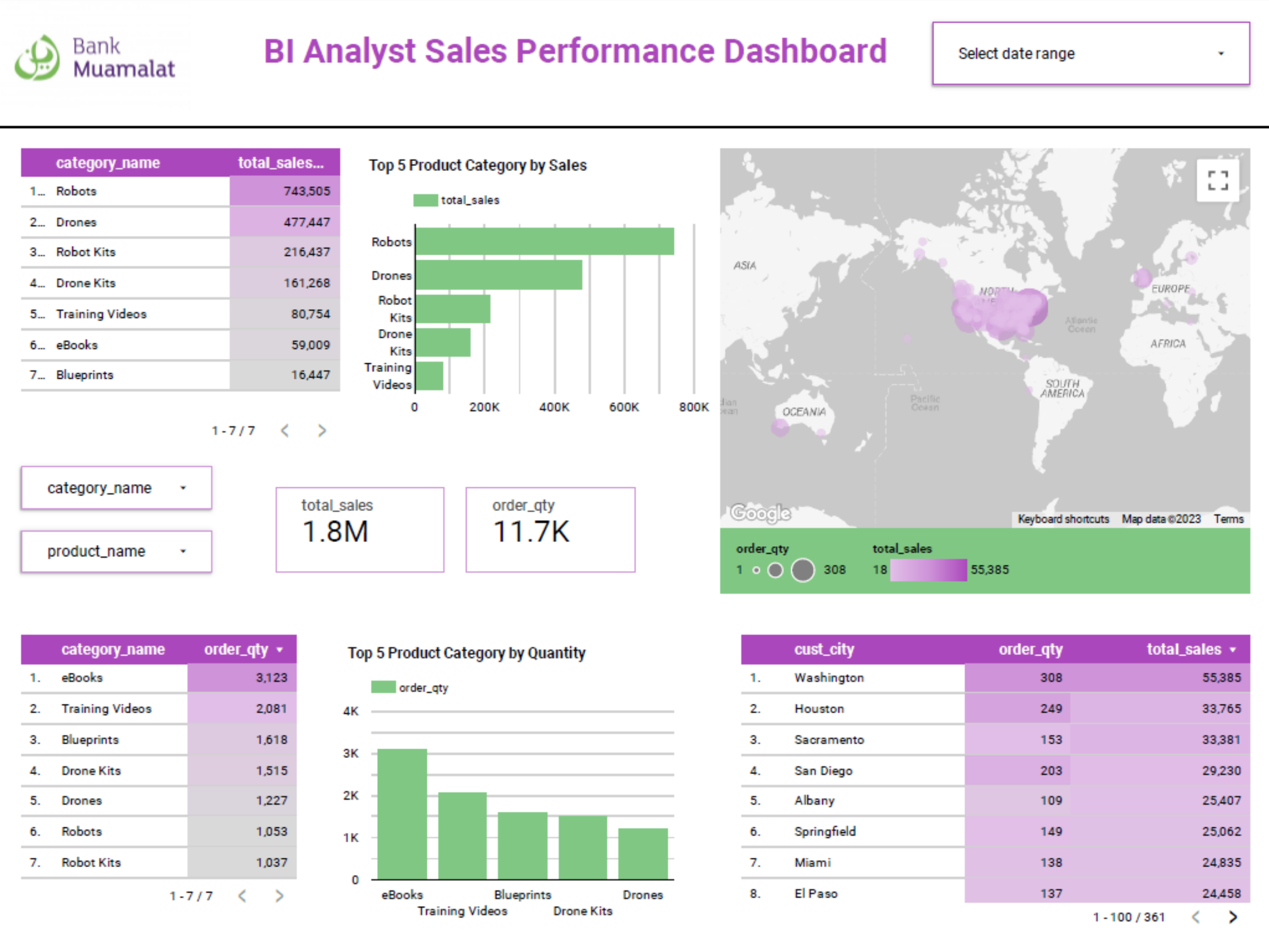
Administration   Schemas

02

Result
Dashboard

Insights:

- Robot products have the highest sales performance of all other category reaching total of 743,505 units sold.

- E-books products dominate the order quantities, surpassing all other products with 3,123 units ordered.

Bank Muamalat — **BI Analyst Sales Performance Dashboard** — Select date range

category_name	total_sales...
1... Robots	743,505
2... Drones	477,447
3... Robot Kits	216,437
4... Drone Kits	161,268
5... Training Videos	80,754
6... eBooks	59,009
7... Blueprints	16,447

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Top 5 Product Category by Sales

category_name ▾   product_name ▾

total_sales
1.8M

order_qty
11.7K

order_qty 1 ○ ● ⬤ 308   total_sales 18 ▨▨ 55,385

category_name	order_qty ▾
1. eBooks	3,123
2. Training Videos	2,081
3. Blueprints	1,618
4. Drone Kits	1,515
5. Drones	1,227
6. Robots	1,053
7. Robot Kits	1,037

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Top 5 Product Category by Quantity

cust_city	order_qty	total_sales ▾
1. Washington	308	55,385
2. Houston	249	33,765
3. Sacramento	153	33,381
4. San Diego	203	29,230
5. Albany	109	25,407
6. Springfield	149	25,062
7. Miami	138	24,835
8. El Paso	137	24,458

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Dashboard Link

Recommendation for sales improvement

- Maximizing and utilizing customer email information as a method for marketing campaigns.

- Create more accurate customer segmentation based on purchase behaviors, to achieve more accurate and targeted strategies for marketing campaigns.

- Implement association rule using historical data to do cross-selling and upselling strategy to make product suggestions for customers.

Contact me
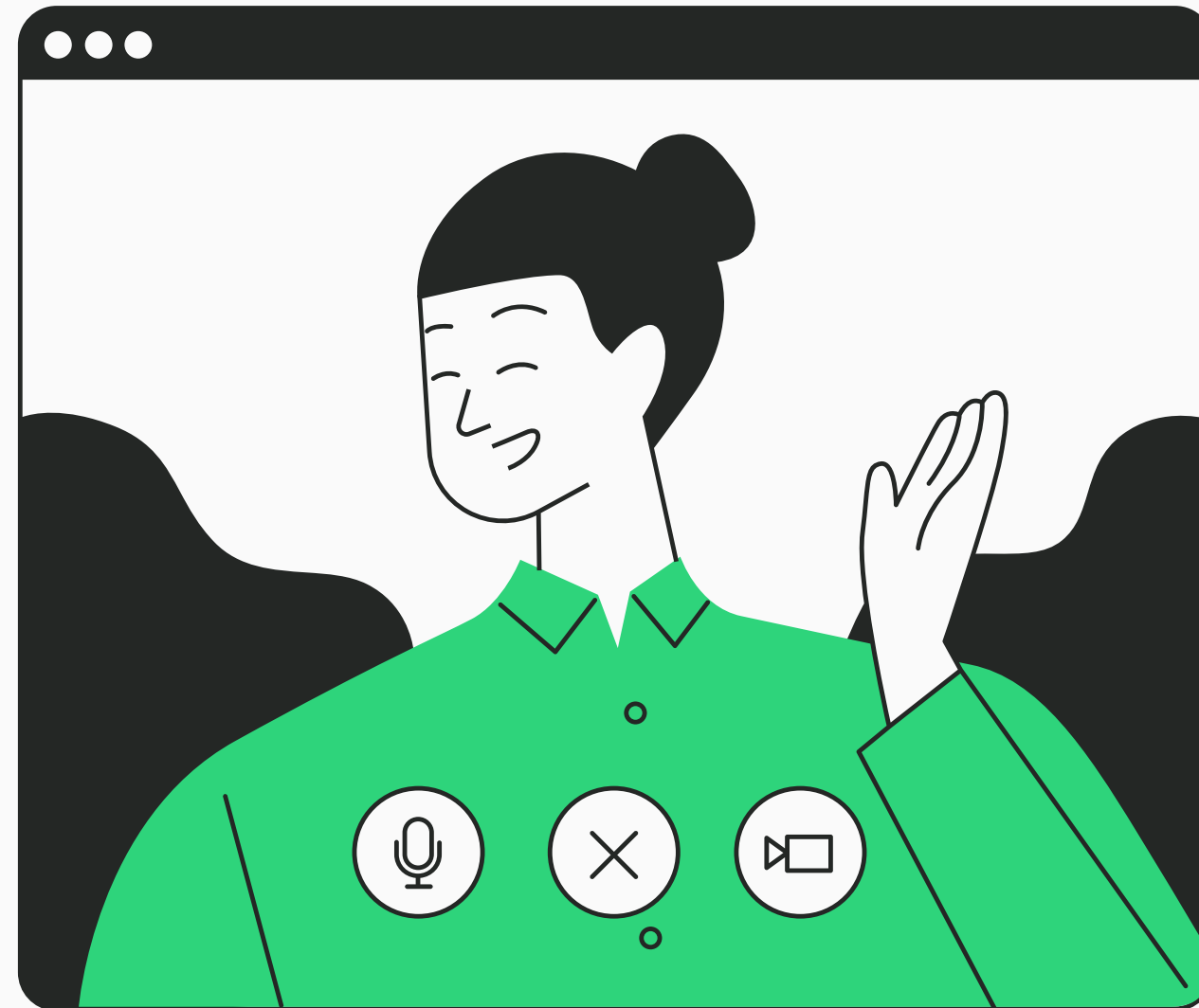
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GITHUB

https://github.com/RadimasJr