



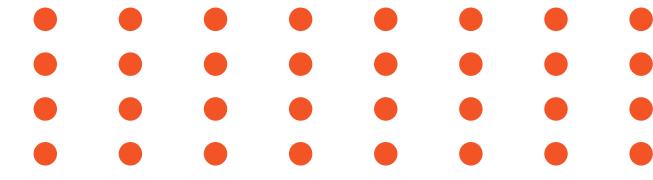
PT Sejahtera
Bersama

SALES ANALYSIS

Atika Rahmah



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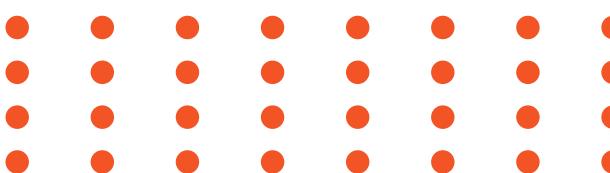
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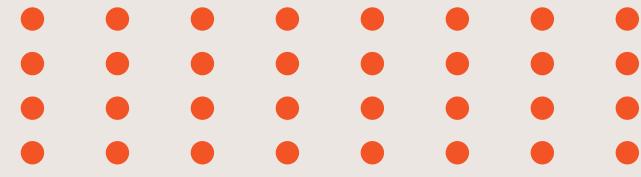
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Introduction

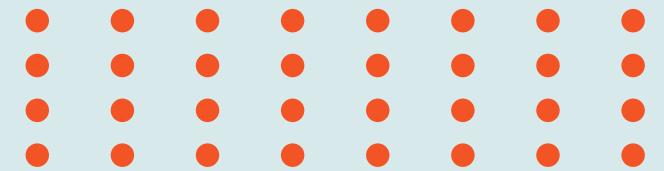
My name is Atika Rahmah, a graduate in Mathematics from Andalas University with a strong academic foundation, including participation in the IndoMS School 2021 and certification in Data Science from MyEduSolve X Kampus Merdeka. I have practical experience as a Business Development Intern at Ecodoe X MyEduSolve, where I successfully boosted sales and client relationships. My skills span technical areas like PostgreSQL, Microsoft Office, Microsoft Power BI, along with soft skills in communication and leadership. I am fluent in Indonesian and have intermediate proficiency in English, with a strong interest in data science.



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Overview



PT Sejahtera
Bersama

PT Sejahtera Bersama is a trading company engaged in the distribution and sale of various product categories such as Robots, Drones, Books, and more. With a wide sales coverage across multiple cities in Indonesia, the company faces several strategic challenges, including:

- Monitoring and evaluating sales performance effectively
- Optimizing product distribution across regions
- Identifying market trends and customer behavior
- Supporting data-driven business decision-making

To address these challenges, this project aims to conduct a comprehensive sales analysis to deliver relevant and actionable insights. The analysis covers performance by product category, sales location, time period, and other key metrics. The results of this project will serve as a foundation for strategic decisions in marketing, distribution, and product development.

Importing Data

Import the provided datasets into the database. The datasets to be imported are:

- Customers
- Products
- Orders
- ProductCategory



Customers Table

④	123 customerid	A-Z firstname	A-Z lastname	A-Z customeremail	A-Z customerphone
1	1	Grazia	Rasmus	grasmusas@i2i.jp#mailto:grasmusas@i2i.jp#	202-577-2595
2	2	Bunny	Trevan	btrevanmj@wordpress.org#mailto:btrevanmj@wordpress.org#	917-903-2827
3	3	Tracie	Grayston	tgrayston7k@pagesperso-orange.fr#mailto:tgrayston7k@pagesperso-	404-868-2391
4	4	Amerigo	Garrelts	agarrelts6e@oaic.gov.au#mailto:agarrelts6e@oaic.gov.au#	415-190-3290
5	5	Shea	Stronghill	sstronghillc1@google.nl#mailto:sstronghillc1@google.nl#	432-775-7828
6	6	Geoffry	Bonde	gbonde90@vimeo.com#mailto:gbonde90@vimeo.com#	415-176-9919
7	7	Noelle	Carlile	ncarlile37@mit.edu#mailto:ncarlile37@mit.edu#	405-745-9826
8	8	Binny	Whetson	bwhetsonio@amazon.de#mailto:bwhetsonio@amazon.de#	585-968-0566
9	9	Curran	MacMichael	cmacmichael5y@businesswire.com#mailto:cmacmichael5y@business	520-968-8763
10	10	Andy	Woodruff	awoodruffo@techcrunch.com#mailto:awoodruffo@techcrunch.com#	315-377-2198
11	11	Darla	Hassen	dhassencj@hp.com#mailto:dhassencj@hp.com#	585-418-2593
12	12	Gerard	Witherdon	gwitherdon8m@ow.ly#mailto:gwitherdon8m@ow.ly#	405-794-2184
13	13	Faber	Boosey	fbooseyjv@chicagotribune.com#mailto:fbooseyjv@chicagotribune.cc	804-270-9294
14	14	Jorgan	Gregh	jgreghik@quantcast.com#mailto:jgreghik@quantcast.com#	727-518-4607
15	15	Davidson	Cramphorn	dcramphornf7@disqus.com#mailto:dcramphornf7@disqus.com#	754-372-3175

The Customers table consists of the following columns : FirstName, LastName, CustomerEmail, CustomerPhone, CustomerAddress, CustomerCity, CustomerState, and CustomerZip.

Orders Table

④	123 orderid	⌚ date	123 customerid	A-Z prodnumber	123 quantity
1	1	2020-01-01	1,866 ↗	EB514	2
2	2	2020-01-01	1,567 ↗	RS706	3
3	3	2020-01-01	2,064 ↗	TV804	6
4	4	2020-01-01	287 ↗	DK203	1
5	5	2020-01-01	422 ↗	EB517	5
6	6	2020-01-01	954 ↗	EB519	5
7	7	2020-02-01	726 ↗	RK604	2
8	8	2020-02-01	1,740 ↗	TV810	1
9	9	2020-02-01	1,652 ↗	TV804	2
10	10	2020-02-01	1,431 ↗	DS304	2

The Orders table consists of the following columns : Date, CustomerID, ProdNumber, and Quantity

ProductCategory Table

④	123 categoryid	A-Z CategoryName	A-Z categoryabbreviation
1	1	Blueprints	BP
2	2	Drone Kits	DK
3	3	Drones	DS
4	4	eBooks	EB
5	5	Robot Kits	RK
6	6	Robots	RS
7	7	Training Videos	TV

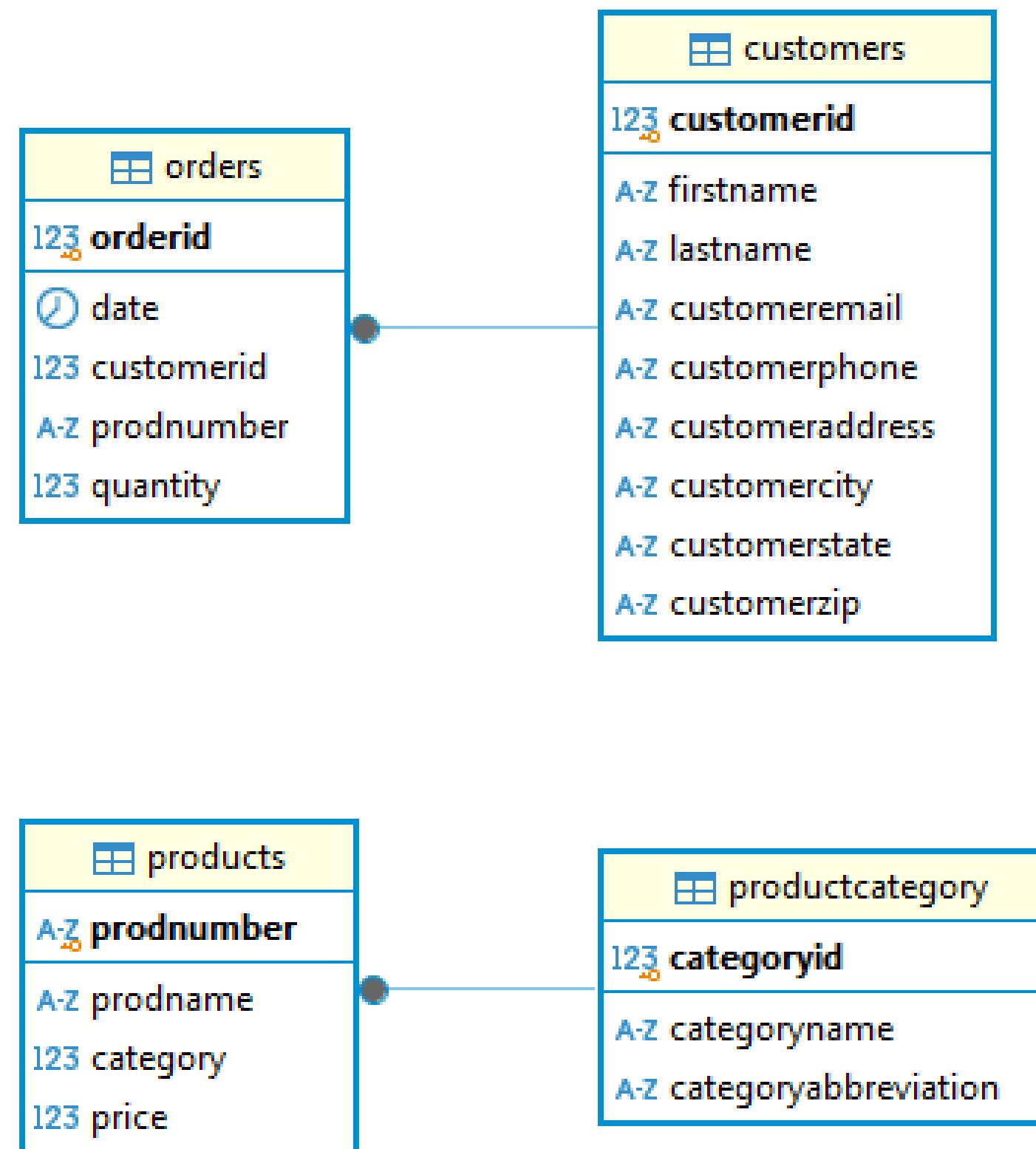
The ProductCategory table consists of the following columns : CategoryName dan CategoryAbbreviation.

Products Table

④	A-Z prodnumber	A-Z prodname	123 category	123 price
1	UniqueBPkey! PRIMARY KEY prodnum	Alien Eyes Drone Blueprint	1 ↗	999
2	BP102	Bsquare Robot Blueprint	1 ↗	899
3	BP104	Cat Robot Blueprint	1 ↗	499
4	BP105	Creature Robot Arms Blueprint	1 ↗	1,200
5	BP106	Hexacopter Drone Blueprint	1 ↗	899
6	BP107	Ladybug Robot Blueprint	1 ↗	1,200
7	BP108	Panda Robot Blueprint	1 ↗	799
8	BP109	QuadroCopter Blueprint	1 ↗	1,099
9	BP110	Sleepy Eye Blueprint	1 ↗	1,199
10	BP111	Upside Down Robot Blueprint	1 ↗	1,200

The Products table consists of the following columns : ProdNumber, ProdName, Category, dan Price.

ER Diagram



Creating Table Master

As a Business Intelligence Analyst at PT Sejahtera Bersama, a master table will be created to consolidate key information from various tables. This master table is designed to support reporting and analytical needs by combining customer, order, and product details.

The table will include the following fields:

- **CustomerEmail (cust_email)** – The customer's email address
- **CustomerCity (cust_city)** – The city where the customer is located
- **OrderDate (order_date)** – The date the order was placed
- **OrderQty (order_qty)** – The quantity of products ordered
- **ProductName (product_name)** – The name of the product
- **ProductPrice (product_price)** – The price of a single unit of the product
- **ProductCategoryName (category_name)** – The category to which the product belongs
- **TotalSales (total_sales)** – The total revenue from the order (calculated as $order_qty * product_price$)

Creating Table Master

```
CREATE VIEW MasterData AS
SELECT
    c.CustomerEmail AS cust_email,
    c.CustomerCity AS cust_city,
    o.Date AS order_date,
    o.Quantity AS order_qty,
    p.ProdName AS product_name,
    p.Price AS product_price,
    pc.CategoryName AS category_name,
    (o.Quantity * p.Price) AS total_sales
FROM
    Orders o
JOIN Customers c ON o.CustomerID = c.CustomerID
JOIN Products p ON o.prodnumber = p.prodnumber
JOIN ProductCategory pc ON p.Category = pc.CategoryID
ORDER BY o.Date ASC;
```

To view the full query,
click [here!](#)

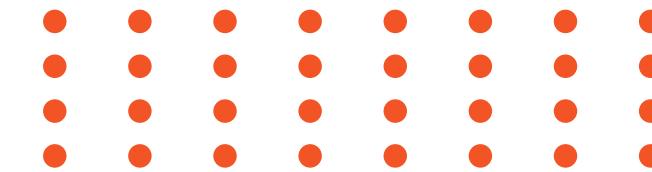
Table Master

masterdata > Enter a SQL expression to filter results (use Ctrl+Space)

View Properties

Grid	○ A-Z cust_email	A-Z cust_city	⌚ order_date	123 order_qty	A-Z product_name	123 product_price
Grid	1 llespercx@com.com#mailto:llespercx@com.com	Des Moines	2020-01-01	5	SCARA Robots	1,950
Text	2 gstiggersdd@eventbrite.com#mailto:gstiggersdd@eventbrite.com	Saint Petersburg	2020-01-01	6	Drone Video Techniques	3,799
Text	3 fvaslerqt@comsenz.com#mailto:fvaslerqt@comsenz.com	Jackson	2020-01-01	2	Polar Robots	2,399
Text	4 tmckernot@tinyurl.com#mailto:tmckernot@tinyurl.com	Katy	2020-01-01	3	RWW-75 Robot	88,300
Text	5 lfromonte9@de.vu#mailto:lfromonte9@de.vu#lfromonte9@de.vu	Birmingham	2020-01-01	5	Spherical Robots	1,675
Text	6 edew@nba.com#mailto:edew@nba.com#edew@nba.com	Honolulu	2020-01-01	1	BYOD-220	6,900
Text	7 mhaskins5@ibm.com#mailto:mhaskins5@ibm.com	Reno	2020-01-02	3	BYOD-550	17,900
Text	8 clowth9p@rakuten.co.jp#mailto:clowth9p@rakuten.co.jp	New York City	2020-01-02	4	Understanding Arduino	1,750
Text	9 gmacenzy8g@constantcontact.com#mailto:gmacenzy8g@constantcontact.com	Springfield	2020-01-02	1	AI for Educators	4,995
Text	10 bminkinan@mtv.com#mailto:bminkinan@mtv.cc	Fairbanks	2020-01-02	5	Robotic Essentials	3,499
Text	11 hjammeqo@comcast.net#mailto:hjammeqo@comcast.net	Santa Rosa	2020-01-03	4	Creature Robot Arms Blueprint	1,200
Text	12 ecleworthcq@hp.com#mailto:ecleworthcq@hp.com	Columbus	2020-01-03	2	BYOR-1500	18,900
Text	13 wkilullenij@canalblog.com#mailto:wkilullenij@canalblog.com	Lancaster	2020-01-03	3	Helicopter Drones	2,095
Text	14 mbermingham2d@php.net#mailto:mbermingham2d@php.net	Chico	2020-01-03	3	BYOD-300	8,900
Text	15 dhoultek@exblog.jp#mailto:dhoultek@exblog.jp#dhoultek@exblog.jp	Los Angeles	2020-01-03	3	RCB-889 Robot	54,900

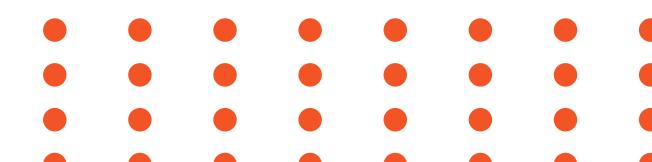
Data Visualization



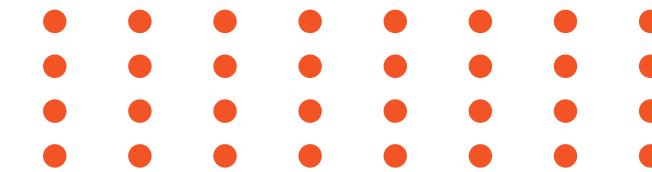
Total Sales

- Insight: Total sales reached 166.44M, indicating a strong sales performance during the analyzed period.
- Recommendation: Identify the top-performing products, categories, or regions that contributed the most in order to maintain or enhance this trend.

166.44M
Total Sales

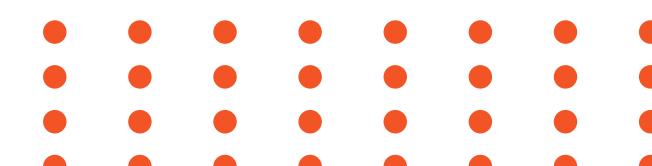


Data Visualization

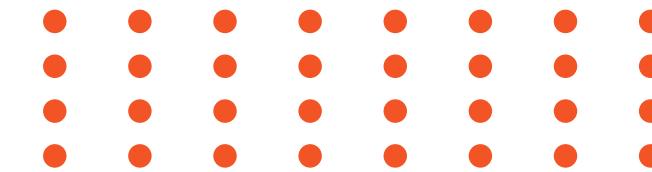


Total Product

- Insight: A total of 69 products were sold, providing customers with a wide range of choices.
- Recommendation: Focus on developing high-performing products that generate the most sales to improve overall efficiency.



Data Visualization

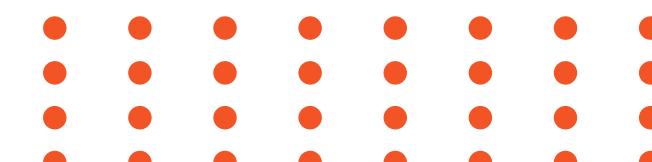


Total Customers

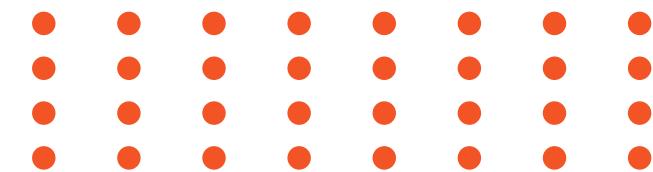
- Insight: There are 1,627 customers, indicating a relatively broad customer base.
- Recommendation: Enhance customer loyalty through reward programs or promotional campaigns.

1627

Total Customers

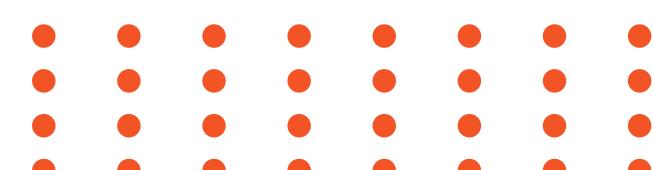
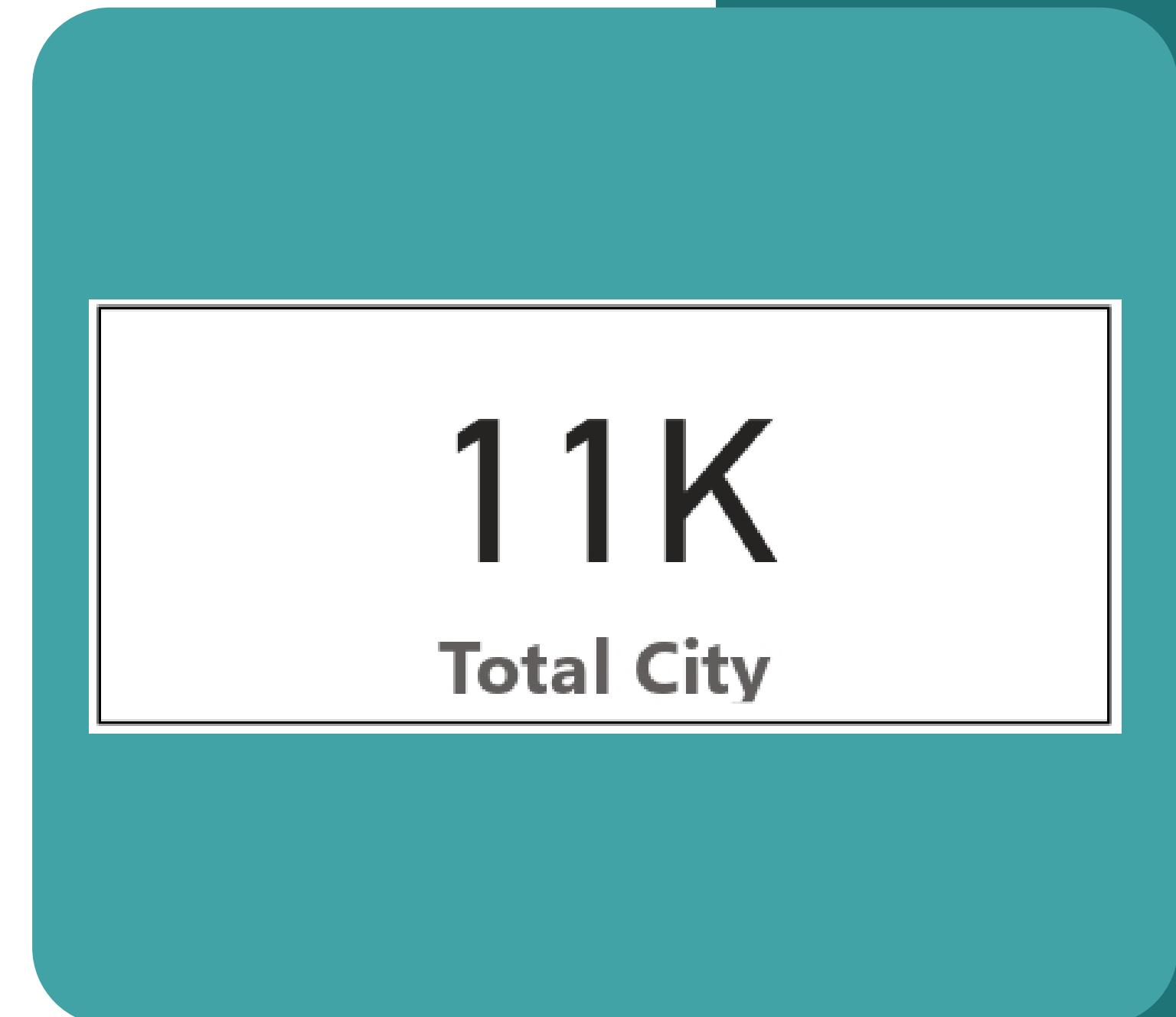


Data Visualization

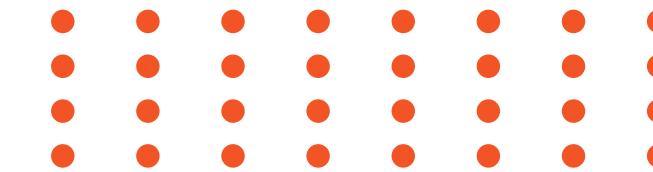


Total City

- Insight: Sales were distributed across 11K cities, showing broad geographical reach.
- Recommendation: Focus marketing and distribution efforts on high-potential cities for better impact.

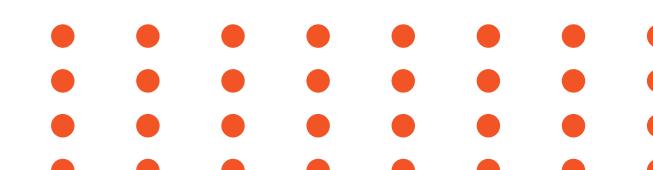


Data Visualization

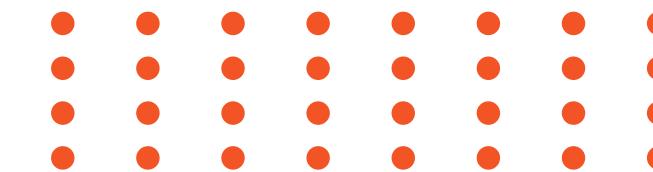


Quantity Sold Per Product

- Insight: The product with the highest number of units sold is Sleepy Eye Blueprint (294 units). Other products such as DTI-84 Drone and AI for Educators also showed strong sales performance.
- Recommendation: Maintain or increase the supply of these popular products to meet customer demand and sustain sales momentum.

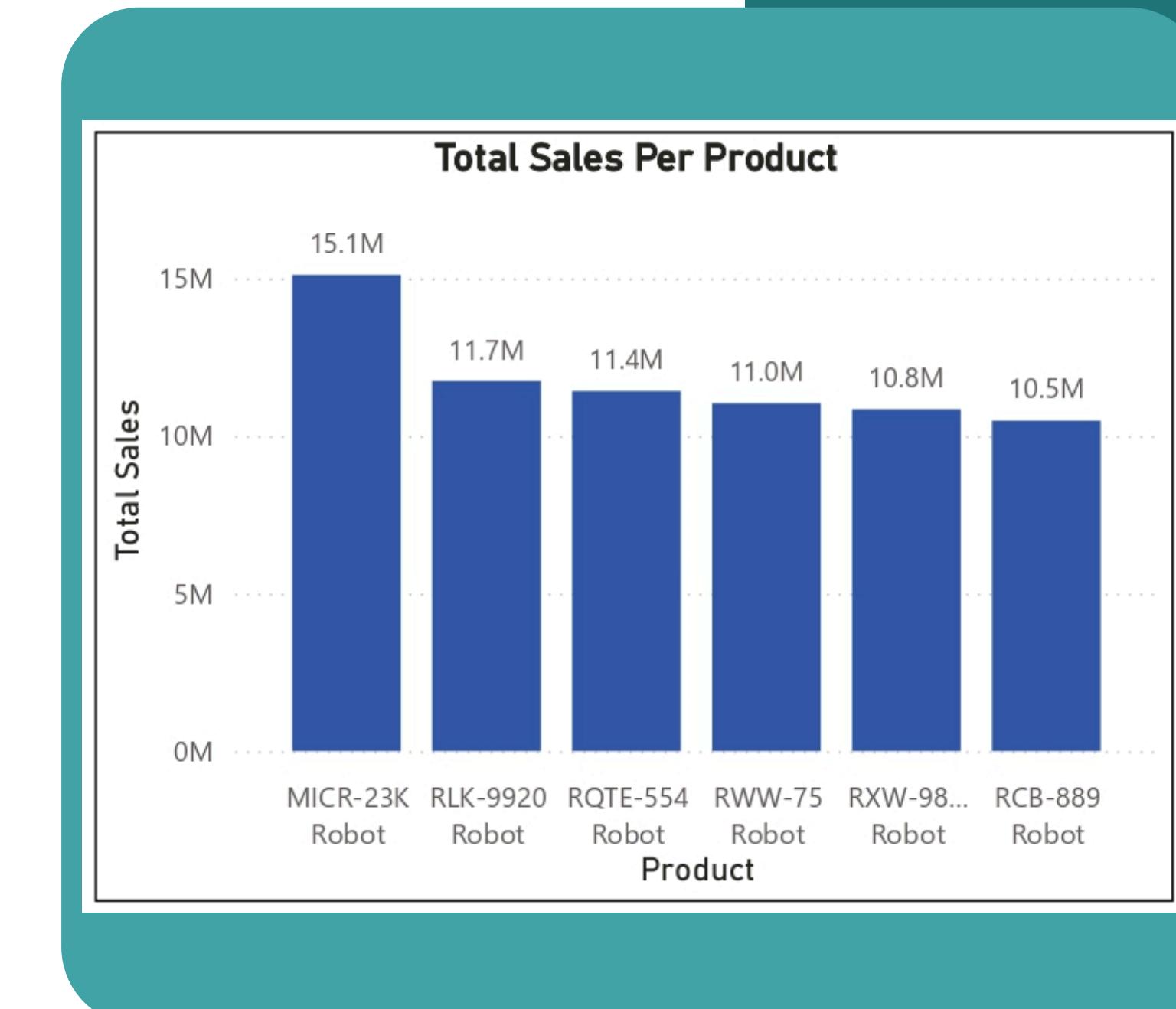


Data Visualization

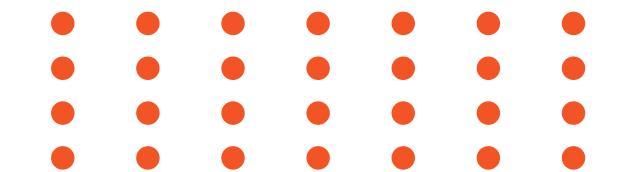


Total Sales Per Product

- Insight: The MCRC-23K RLX-9902 Robot is the top sales contributor, generating 15.11M in total revenue.
- Recommendation: Focus promotional efforts on this product to further increase sales volume and capitalize on its strong performance.

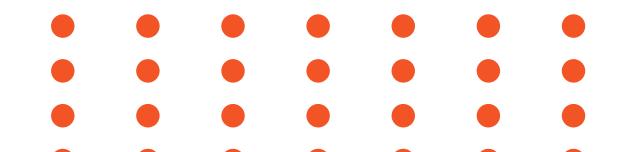
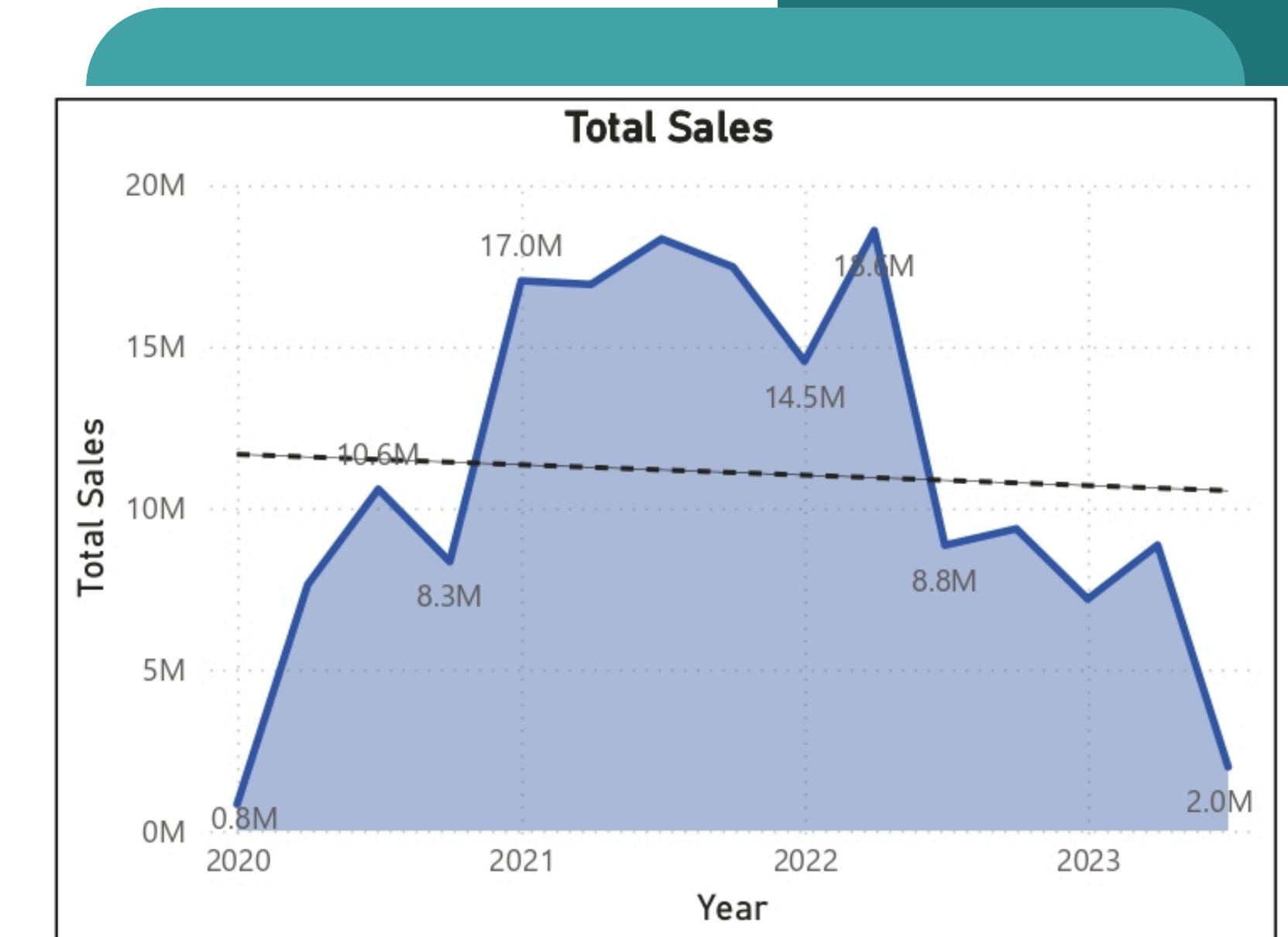


Data Visualization

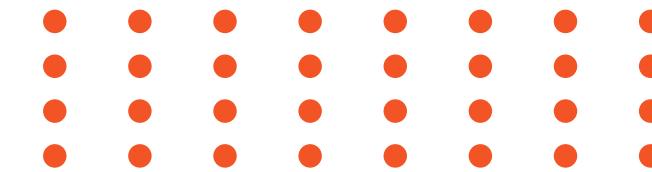


Total Sales (Trend Over Time)

- Insight: Sales peaked in 2021 with a total of 17M, but showed a declining trend, dropping to 8.8M in 2023.
- Recommendation: Conduct an in-depth analysis to identify the causes of the decline and focus on strategic actions to restore sales growth.

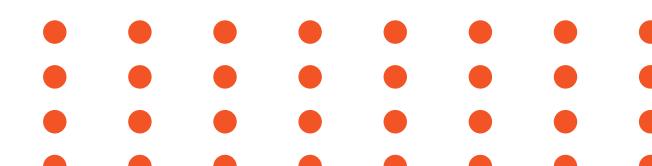


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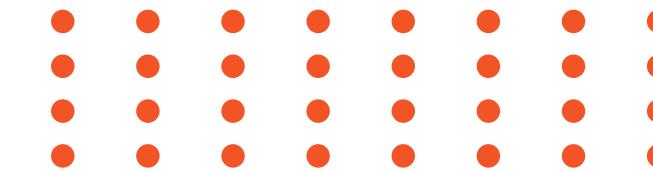


Quantity Sold Per City

- Insight: The city with the highest number of units sold is Washington (289 units), followed by Houston (239 units).
- Recommendation: Increase marketing focus in high-performing cities and identify growth opportunities in low-performing areas.



Data Visualization

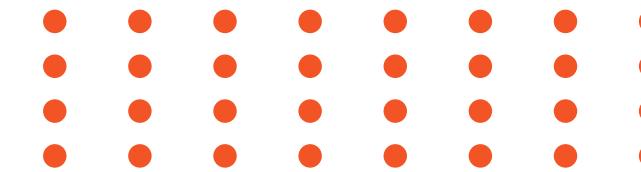


Total Sales Per City

- Insight: Washington also recorded the highest total sales at 1.05M, outperforming other cities.
- Recommendation: Analyze market preferences in Washington to replicate successful strategies in other cities.



Data Visualization

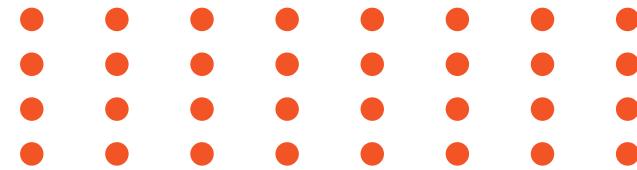


Location (Map Visualization)

- Insight: Sales distribution appears to be relatively even across locations, with a notable concentration in certain areas—likely in the central and eastern regions of the U.S.
- Recommendation: Develop strategies to expand market reach in locations with low sales penetration.

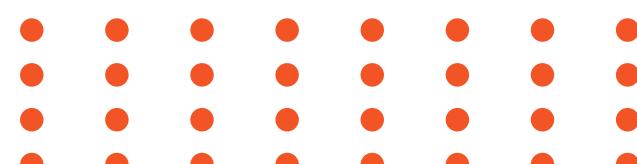
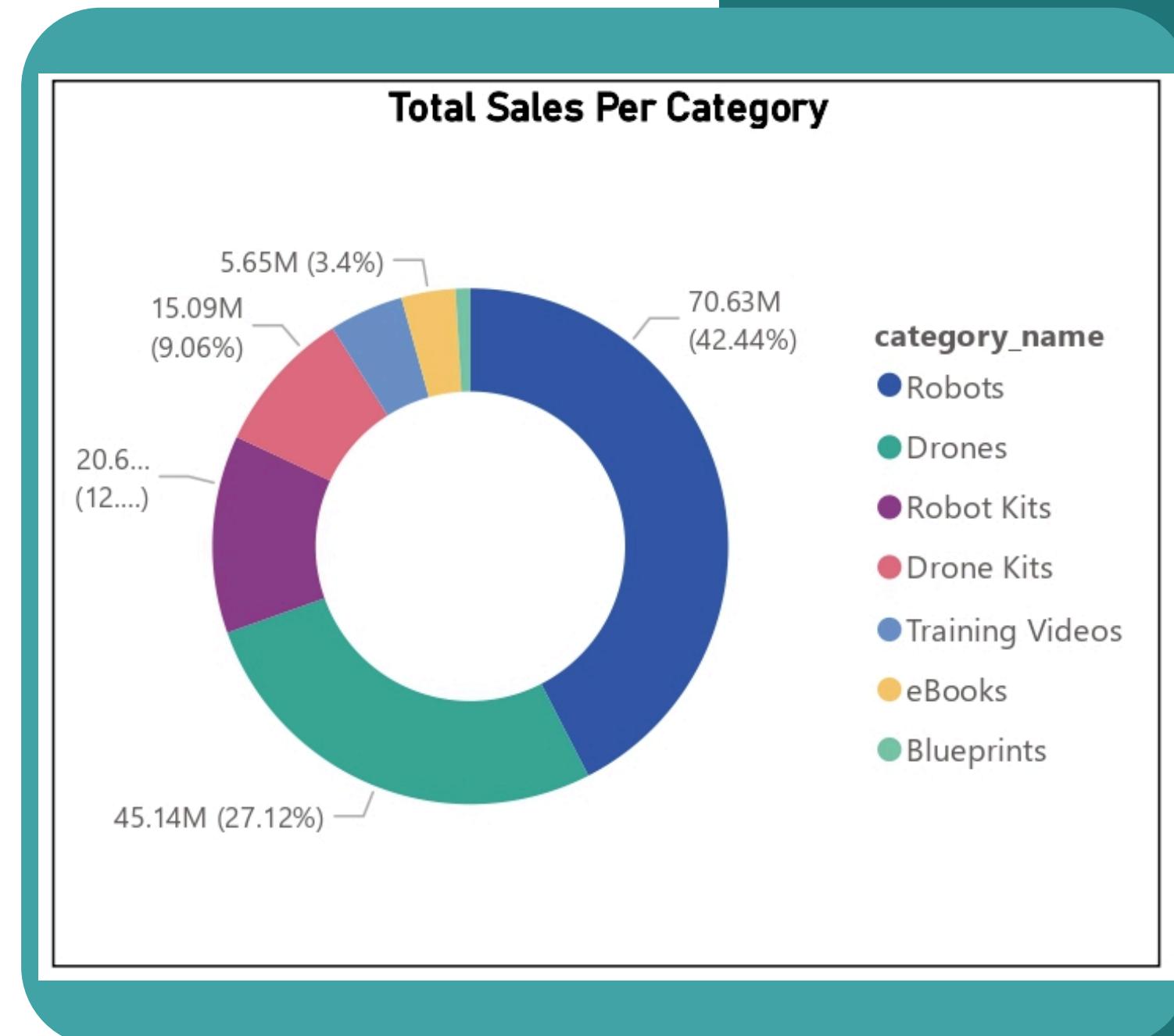


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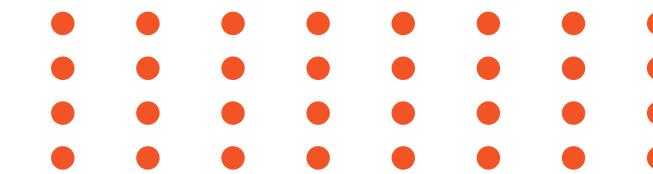


Total Sales Per Category

- Insight: The Robots category contributed the highest sales at 42.44M (42.44%), followed by Drones (27.12%) and Books (12.42%).
- Recommendation: Invest more in top-performing categories to maintain a competitive advantage in the market.

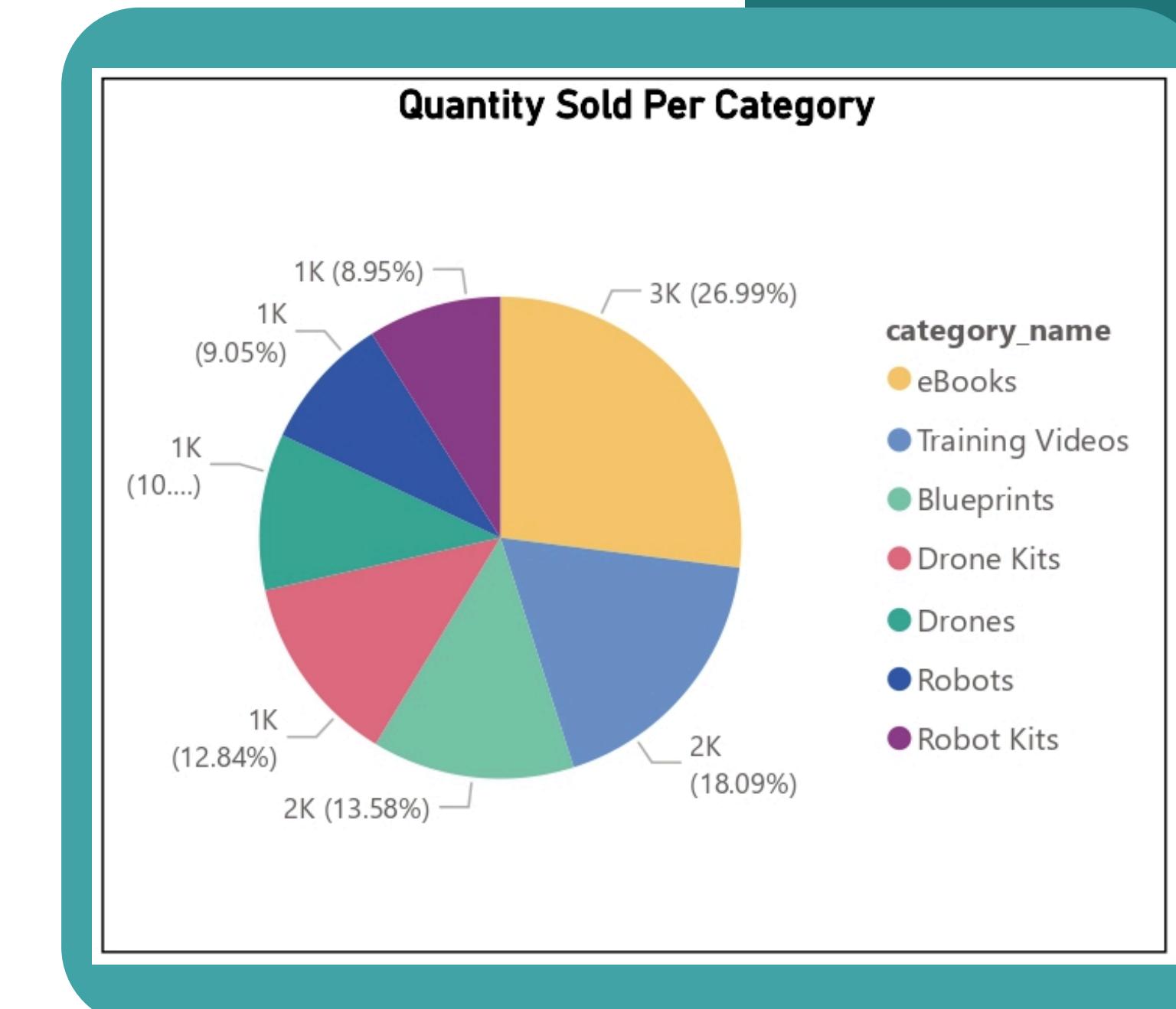


Data Visualization



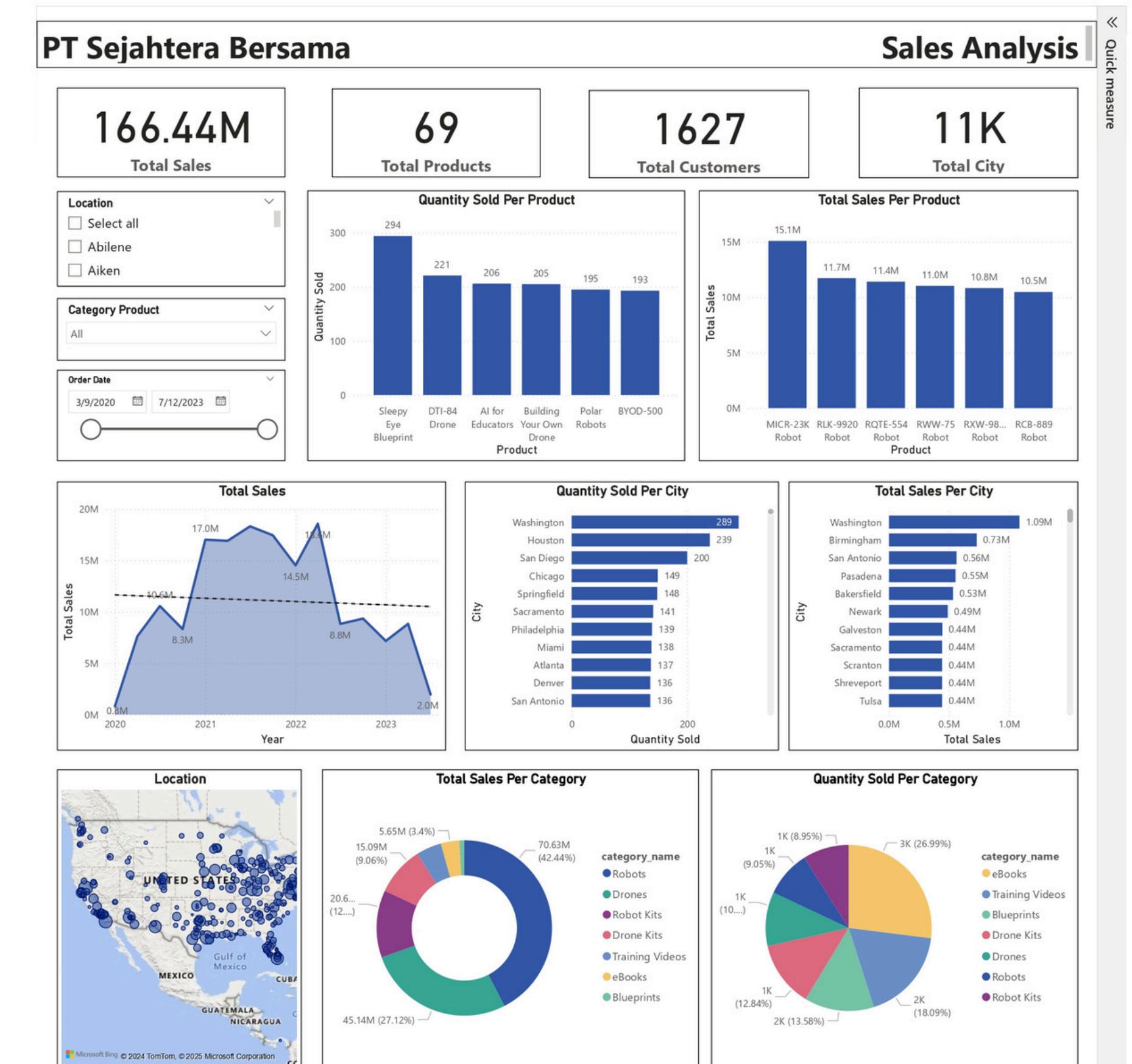
Quantity Sold Per Category

- Insight: The Books category recorded the highest sales volume with 6K units sold, yet its contribution to total revenue is lower compared to the Robots category.
- Recommendation: Evaluate the profit margin potential of high-volume but low-value categories like Books, to assess their strategic importance.



Sales Analysis Dashboard

To view the dashboard more clearly, click [here!](#)



Dashboard Summary

Total Sales

Total sales reached 166.44M, with the Robots category contributing the most at 42.44%.

Product Performance

The MCRC-23K RLX-9902 Robot was the top contributor to total revenue, generating 15.11M in sales.

Sales Trend

Sales peaked in 2021 at 17M, but saw a significant decline in 2023 to 8.8M.

Geographic Insights

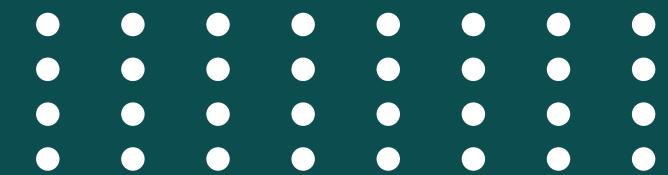
Washington led in both units sold (289 units) and total sales value (1.05M).

Category Analysis

The Books category had the highest sales volume (6K units), but its revenue contribution was lower compared to Robots.



Insight & Rekomendasi



Time Management & Sales Trend

Investigate the decline in sales after 2021 to design strategies aimed at boosting performance in the coming years.

Strategic Geographic Focus

- Strengthen market penetration in high-performing cities like Washington through loyalty programs or targeted promotions.
- Explore underperforming cities for potential market expansion opportunities.

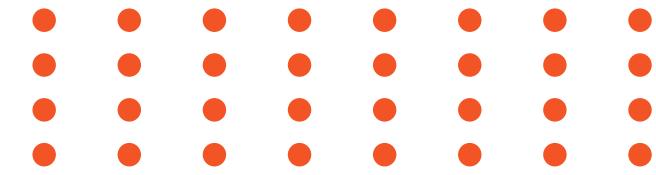
Optimasi Produk

- Focus on top-performing products such as the MCRC-23K RLX-9902 Robot and the Robots category to maintain strong sales.
- Enhance marketing strategies for the Books category, as it has high sales volume but lower revenue contribution.

Operational Efficiency

Leverage data to forecast product demand based on historical trends, helping to minimize the risk of overstocking or understocking.

Summary



As a Business Intelligence Analyst, this project provides a comprehensive overview of PT Sejahtera Bersama's sales performance. The dashboard presents interactive data visualizations that support the company's strategic decision-making process.

By implementing the provided recommendations, PT Sejahtera Bersama can enhance operational efficiency, expand into new markets, and optimize overall revenue performance.



PT Sejahtera
Bersama

Thank You

Presented by :
Atika Rahmah

