



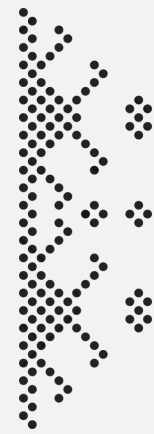
Comprehensive Analysis of GMV Patterns and Influencing Factors Based on Store, Buyer, and Performance Data

presented by Alfa Isa Dewa

Case Description

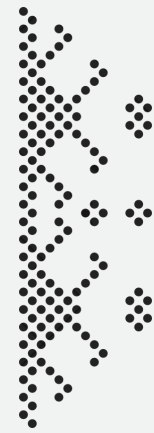


The Company aims to conduct an in-depth analysis of GMV (Gross Merchandise Value) patterns in their industry while understanding how factors such as buyer location, store performance, and transaction timing impact revenue. This project seeks to provide strategic insights to help improve sales efficiency and optimize pricing.



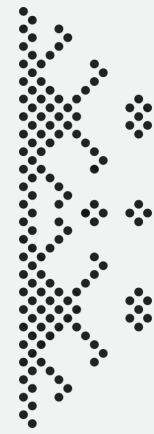
GMV Analysis Based on Buyer Country

- To understand how the geographical location of buyers impacts company revenue.



GMV Analysis Based on Store Performance

- To evaluate how store performance (clicks, impressions, and product views) affects GMV.



GMV Trends Based on Time

- To identify seasonal patterns or monthly trends in GMV.



GMV Contribution per Store

- To identify stores contributing the most to the company's revenue.



Active Buyer Analysis

- To understand purchasing patterns of active buyers who significantly contribute to GMV.



Relationship Between Buyer Registration and GMV by Quarter in 2020

- By conducting this analysis, the business gains actionable insights that drive better decision-making and improve ROI on customer acquisition efforts.

How to Aim ?



Dataset



order_tab

Column	Description
shopid	Representing the shop where the order was placed.
orderid	Unique ID for each order.
itemid	ID for the item that was ordered.
gmv	Gross Merchandise Value, representing the total value of the transaction.
order_time	The date and time when the order was placed.

performance_tab

Column	Description
shopid	Unique ID representing the shop.
total_clicks	Total number of clicks received by the shop's products.
impressions	Total number of impressions (times the shop's products were displayed).
Item_views	Total number of times individual items were viewed.

user_tab

Column	Description
shopid	Representing the shop associated with the user.
buyerid	Unique ID representing the buyer.
register_date	The date when the buyer registered on the platform.
country	The country where the buyer is located.

GMV Analysis Based on Buyer Country



GMV Analysis Based on Store Performance

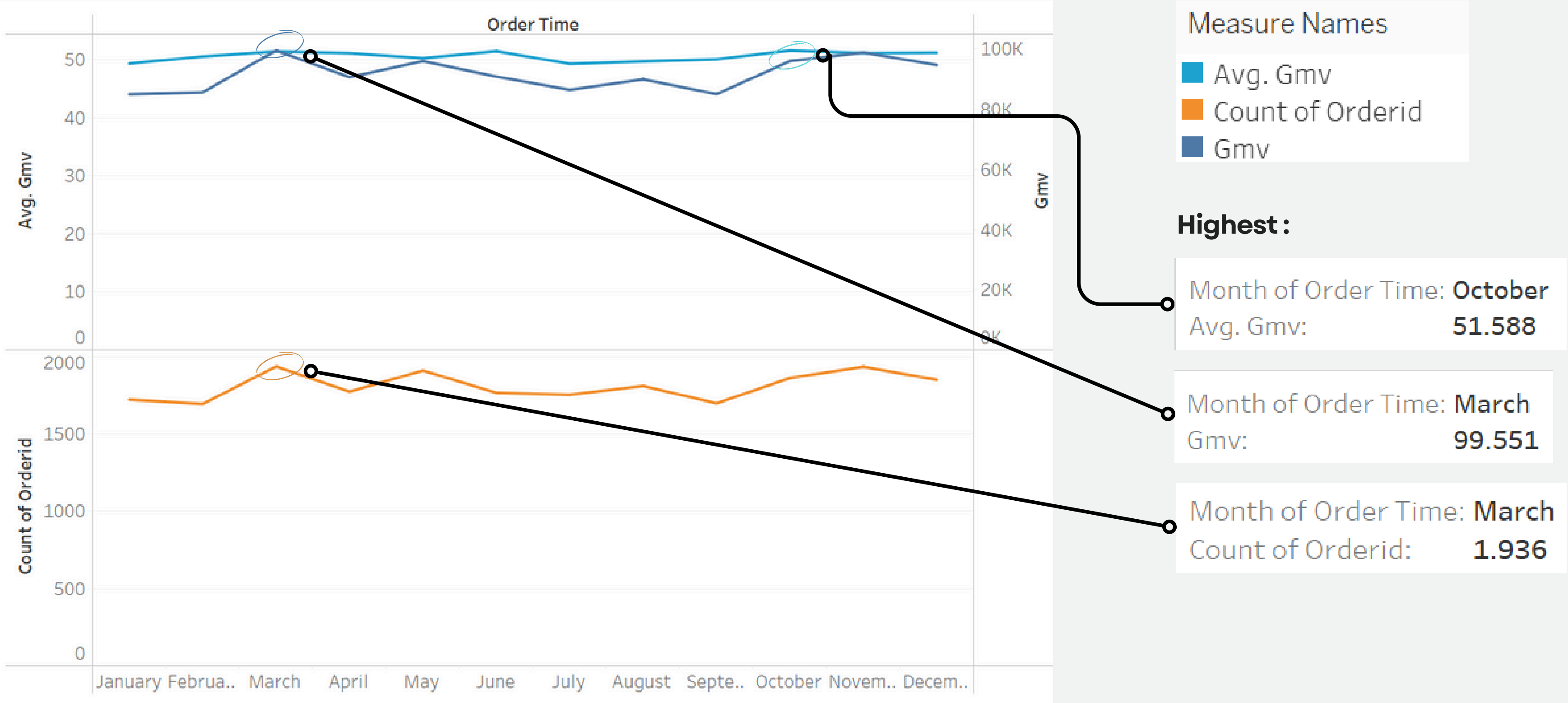
Highest :

shopid	total_gmv	avg_total_clicks	avg_total_views	avg_impressions
2206	78192	54.85	168.85	220.81
2659	56952	49.75	158.87	235.04
2523	47796	49.9	147.05	229.95
2688	47240	39.8	143.45	234.85
2199	43692	44.59	154.86	233.05
2130	43218	50.95	143.0	234.81
2224	43160	46.7	150.5	211.4
2401	41819	45.79	138.89	223.95

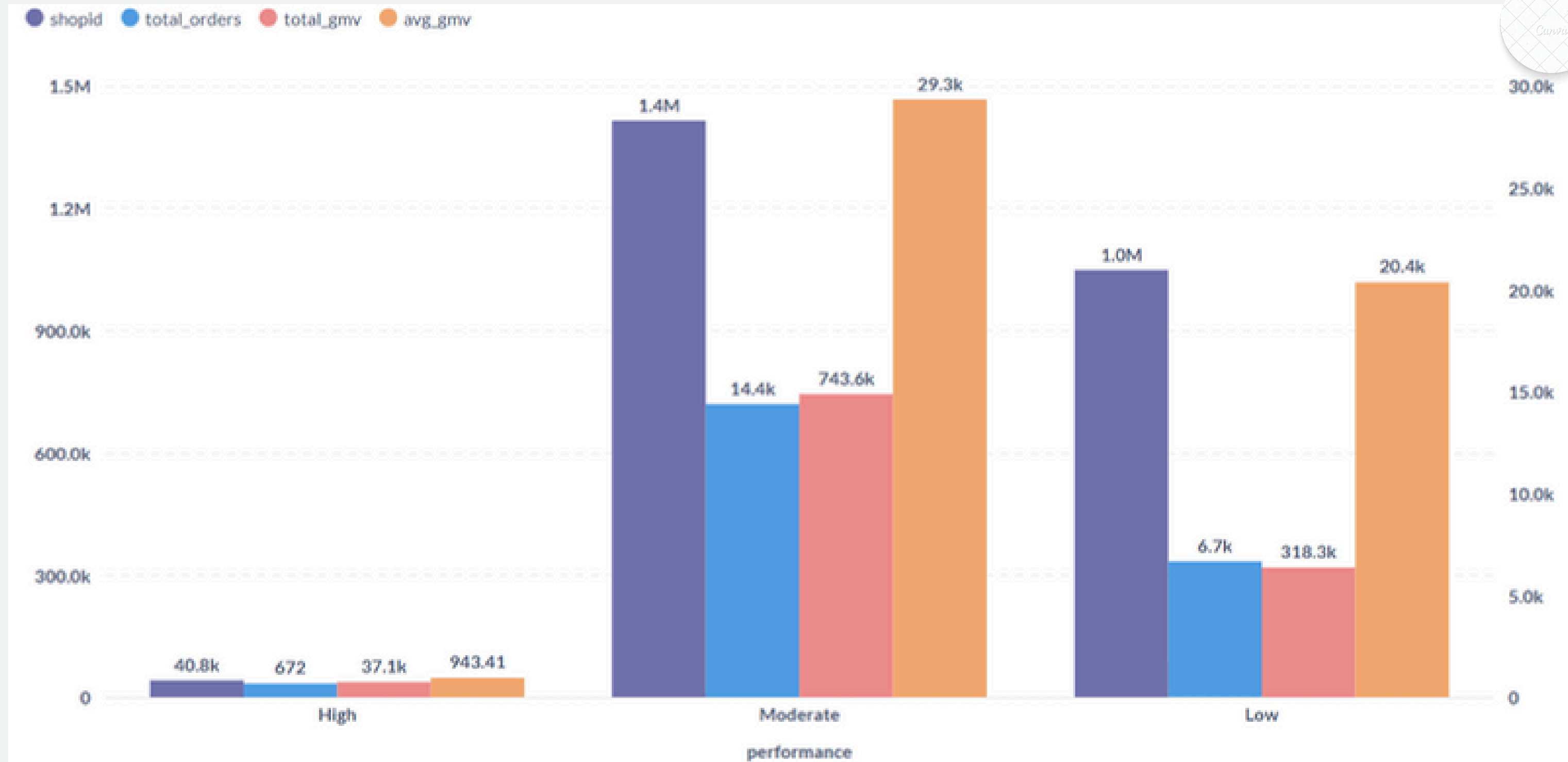
Lowest :

shopid	total_gmv	avg_total_clicks	avg_total_views	avg_impressions
2982	171	56.0	151.0	214.33
2929	411	37.33	155.0	226.0
2413	1024	60.25	169.5	228.0
2123	1108	35.75	161.5	236.5
2773	1236	62.75	160.0	187.25
2830	1328	32.75	137.0	254.75
2244	1362	49.67	146.33	284.33
2163	1376	62.25	134.5	213.25

GMV Trends Based on Time



GMV Contribution per Store



Active Buyer Analysis

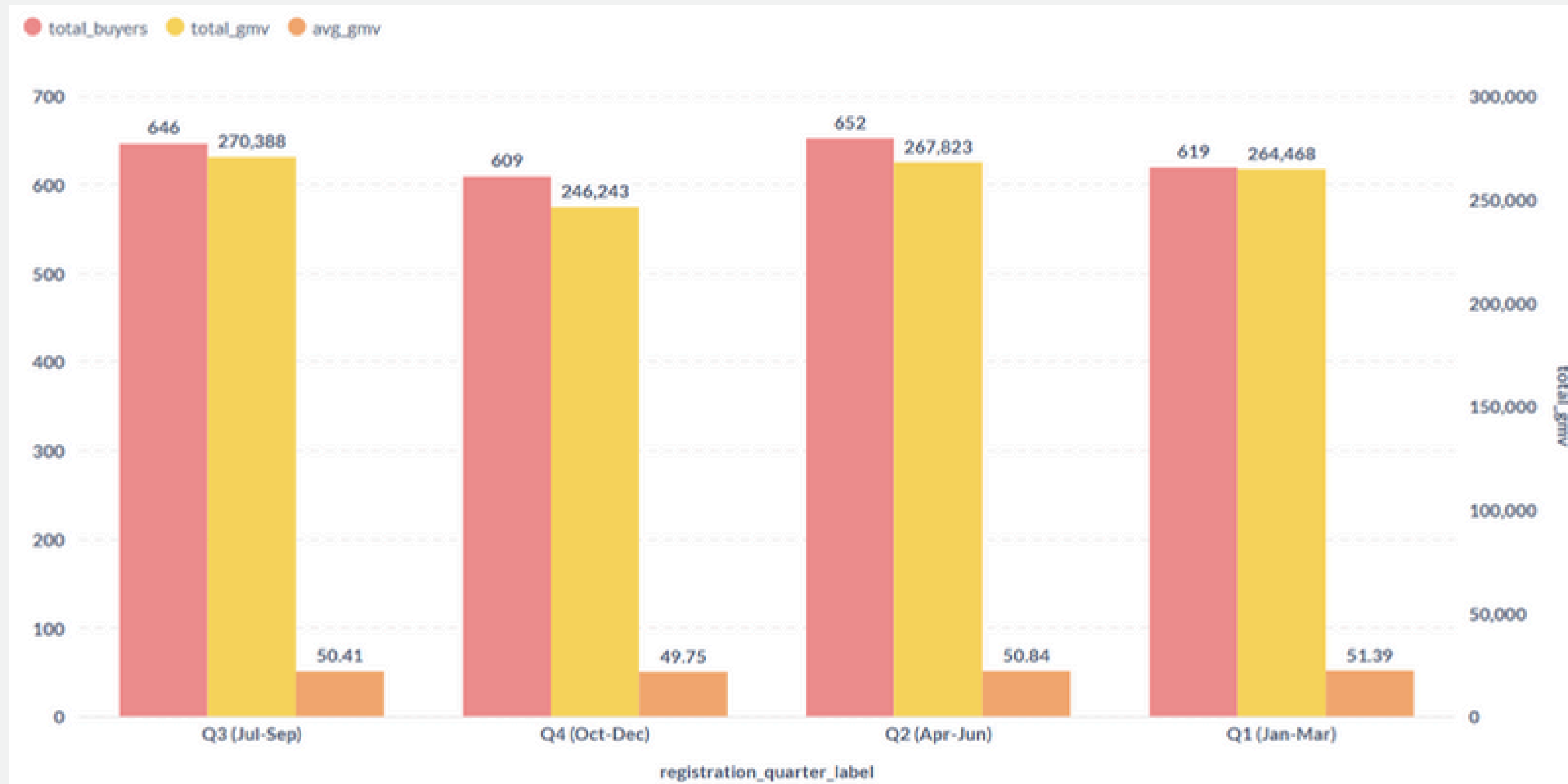
Highest :

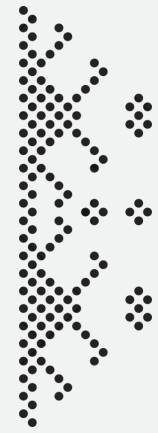
buyerid ▼	total_gmv ▼	contribution ▼
2103	1162	0.11
3332	1217	0.11
1895	1087	0.1
1148	1045	0.1
1655	1121	0.1
3766	944	0.09

Lowest :

buyerid ▼	total_gmv ▼	contribution ▼
3283	46	0.0
4669	47	0.0
4654	12	0.0
3592	48	0.0
2991	41	0.0
4188	35	0.0

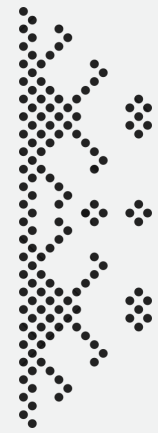
Relationship Between Buyer Registration and GMV by Quarter in 2020





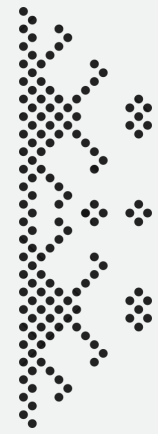
GMV Analysis Based on Buyer Country

- **Indonesia** leads in both total buyers and GMV but has the lowest average GMV per buyer, suggesting larger buyer participation but lower spending per individual.
- **South Korea** and the **Philippines**, while having fewer buyers and lower GMV, show slightly higher spending per buyer.



GMV Analysis Based on Store Performance

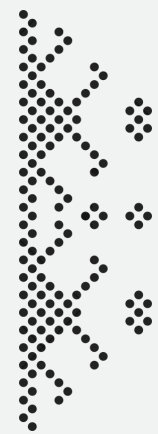
- High-performing stores generate significantly higher GMV with balanced clicks, views, and impressions.
- Low-performing stores struggle with conversions, even if impressions are relatively high, pointing to potential issues in product relevance, pricing, or branding.



GMV Trends Based on Time

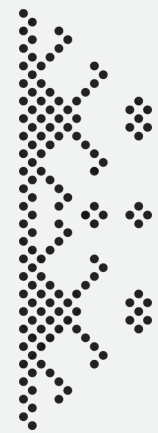
- The average GMV peaked at 51.588 in October.
- The total GMV reached 99.551 in March.
- March also had the highest order count at 1,936 orders.
- Order counts and GMV fluctuate month-to-month, indicating seasonal or event-driven patterns.
- Despite order count declines in some months, average GMV remains stable, suggesting fewer but higher-value transactions.

Conclusion



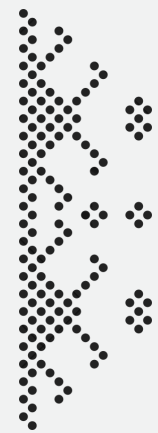
GMV Contribution per Store

- **High Performance Store** contribute the lowest total GMV (**37.1k**) and total orders (**672**).
- **Moderate Performance Store** contribute the highest total GMV (**743.6k**) and the most total orders (**14.4k**).
- **Low Performance Store** contribute a moderate total GMV (**318.3k**) with fewer total orders (**6.7k**).



Active Buyer Analysis

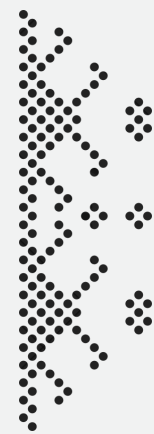
- **The top buyers** (e.g., buyerid 2103, 3332, 1895) contribute significantly to GMV, with the highest total GMV being 1162 and contribution rates around 0.10 to 0.11.
- **Low-Contributing Buyer** performing indicates a long tail of less active or low-spending buyers who contribute minimally to overall revenue.



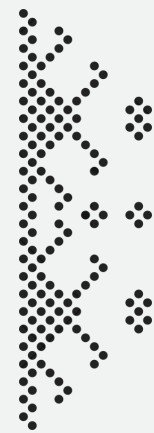
Relationship Between Buyer Registration and GMV by Quarter in 2020

- The drop in total buyers from Q3 to Q4 (646 to 609) might signal challenges in retaining or acquiring buyers, possibly due to market saturation or changing demand patterns.
- Q3 (July–September) has the highest total buyers (646) and the highest total GMV (270,388), indicating a strong correlation between buyer registration and GMV.

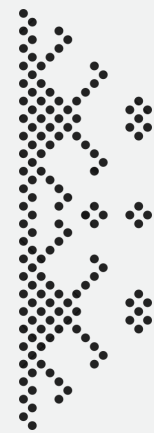
Conclusion



Seasonal Campaigns: Create region-specific promotions tied to cultural or national holidays to drive engagement and sales.



Provide training or resources for underperforming store owners to improve their e-commerce strategies.



Allocate more marketing resources to March and October for maximum ROI.



Introducing targeted marketing campaigns to reach a broader audience.



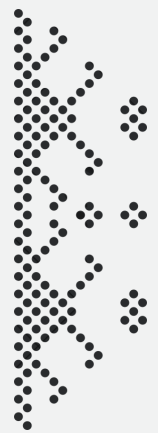
For the lowest tier, focus on engagement campaigns that encourage them to make additional purchases, such as personalized emails, reminders for abandoned carts, or incentives for repeat orders.



Use retention strategies like post-purchase engagement (emails, feedback collection) and loyalty rewards to ensure that registered buyers stay active in subsequent quarters.

Reccomendations

Thank You !



github

[e-commerce gmv analysis](#)

dashboard

[Tableau](#)