## **SQL CODE ANALYSIS**

Click on the below link to view the corresponding sql code and powerbi dashboard. (It is also attached separately)

# SQL CODE

### POWERBI DASHBOARD

### 1. Returning Visitors

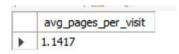


**Returning Visitor Rate:** 83.11% of the total visitors are returning visitors. This indicates a high level of user engagement and loyalty.

#### **Conclusions**

- **Strong User Base:** The high returning visitor rate suggests that website is providing value to users, leading them to return consistently. This is a positive sign for the project's success.
- Effective User Retention: Strategies for user retention are working well. This could be attributed to factors like personalized content, loyalty programs, or a high-quality user experience.
- Potential for Growth: A loyal user base can provide a strong foundation for future growth.
  We leverage this returning audience to expand offerings, introduce new features, and drive further engagement.
- Focus on New User Acquisition: While retaining existing users is crucial, also focus on attracting new visitors to maintain a healthy growth trajectory.

### 2. Pages per visit



The **average pages per visit** metric of **1.1417** indicates that users, on average, view only slightly more than one page during their visit to the e-commerce platform.

This suggests the following possibilities:

- **Limited Engagement**: Customers might be finding what they need on the first page they visit, or the site may not be encouraging further exploration.
- **Navigation Challenges**: If the platform has a complex navigation system, it might be discouraging users from exploring more pages.
- Content Focus: Users could be landing directly on product pages (via ads, search engines, etc.) and completing their transactions without browsing.

#### 3. Bounce Rate

	bounced_visits	bounce_rate	
•	88863	90.06446	

The **bounce rate** of **90.06%** is extremely high, indicating that 90% of visitors leave the website after viewing only one page without interacting further. Additionally, the total number of **bounced visits** is **88,863**, which represents a significant portion of the overall traffic.

- Implications:
- **Low Engagement**: Most users are not finding the content or products engaging enough to continue exploring the website.
- Irrelevant Traffic: The high bounce rate may suggest that the website is attracting the wrong audience or not meeting visitor expectations.
- **Poor User Experience**: Issues like slow page load times, unappealing design, or difficulty in finding relevant information could be driving visitors away.

### 4. Average Order Value



The **Average Order Value (AOV)** of **137.75** indicates that, on average, customers spend approximately **137.75** currency units per order. This metric is a key indicator of customer purchasing behavior and overall revenue generation.

### 5. Unique Visitors



With an AOV of 137.75, converting just 10% of unique visitors (9,609 customers) could yield a total revenue of 1,323,114 currency units. 1% increase in conversion rate would result in 960 additional orders, which could drive notable revenue growth.

### 6. Top 10 Products

	product_id	product_category_name	total_quantity_sold
١	422879e10f46682990de24d770e7f83d	ferramentas_jardim	793
	aca2eb7d00ea1a7b8ebd4e68314663af	moveis_decoracao	640
	368c6c730842d78016ad823897a372db	ferramentas_jardim	551
	53759a2ecddad2bb87a079a1f1519f73	ferramentas_jardim	545
	99a4788cb24856965c36a24e339b6058	cama_mesa_banho	542
	389d119b48cf3043d311335e499d9c6b	ferramentas_jardim	534
	d1c427060a0f73f6b889a5c7c61f2ac4	informatica_acessorios	369
	a62e25e09e05e6faf31d90c6ec1aa3d1	relogios_presentes	367
	3dd2a17168ec895c781a9191c1e95ad7	informatica_acessorios	306
	b532349fe46b38fbc7bb3914c1bdae07	moveis_decoracao	304

The top 10 products significantly drive business performance, reflecting high demand and customer preference. These products should be prioritized for stock availability, promotional campaigns, and strategic placement to maximize revenue and customer satisfaction.

#### 7. Bottom 10 Products

	product_id	product_category_name	total_quantity_sold
•	a6f449f6257f26e556013151cee46b4b	papelaria	1
	08279c494018541f71443c07d77560f8	utilidades_domesticas	1
	1c0c0093a48f13ba70d0c6b0a9157cb7	moveis_decoracao	1
	db886bd83f6a076a2caeb7fd02722c35	informatica_acessorios	1
	87b08e712cc4c9fe70984c5a24b29e2f	brinquedos	1
	557d850972a7d6f792fd18ae1400d9b6	ferramentas_jardim	1
	350688d9dc1e75ff97be326363655e01	cama_mesa_banho	1
	cd71c76f5ab15f51f24fb214fc42d8ab	perfumaria	1
	d0fb1e667e989933a80444f93da833c0	utilidades_domesticas	1
	4089861a1bd4685da70bddd6b4f974f1	ferramentas_jardim	1

The bottom 10 products show minimal sales contribution, indicating low demand or potential issues with visibility, pricing, or relevance. These products require reevaluation for improvement strategies or consideration for discontinuation to optimize resource allocation.

## 8. Sum of Review Count by their Review Score

	review_score	review_count
•	1	1789
	2	458
	3	737
	4	1433
	5	5422

#### **Overall Positive Sentiment:**

- The highest number of reviews (5422) were given a score of 5, indicating a high level of satisfaction among users.
- The majority of reviews (5422 + 1433 = 6855) fall into the positive range (scores 4 and 5), suggesting a positive overall user experience.

### **Areas for Improvement:**

could be improved to enhance user satisfaction.					

• A significant number of reviews (1789 + 458 + 737 = 2984) fall into the lower score range (scores 1, 2, and 3). This indicates that there are areas where the product or service