

# ShopNest Store Performance Dashboard Report

## **1. Introduction**

ShopNest is a leading e-commerce platform in Portugal, connecting small businesses with customers across the country. The dashboard provides a comprehensive analysis of sales performance, customer behaviour, and operational efficiency using Power BI. This document explains the dashboard in detail, covering visualizations, insights, and key performance indicators (KPIs).

### **Objective**

The dashboard aims to analyze store performance across multiple dimensions, including revenue, sales, order trends, payment methods, and product ratings.

## **2. Dashboard Overview**

The dashboard is designed to address critical business questions related to sales, customer preferences, and logistics. It consists of various visualizations, including bar charts, pie charts, line charts, and maps, each focusing on specific aspects of the business.

### **Key Features:**

- Revenue and sales performance tracking
- Order delay analysis
- Payment method distribution
- Product rating insights
- Regional & Seasonal sales performance

### 3. Key Performance Indicators (KPIs)

#### 3.1 Revenue

- **Definition:** The total revenue generated from sales.
- **Calculation:** Sum of Payment Values.
- **Insight:** Helps assess the overall financial health of ShopNest.

#### 3.2 Total Sales

- **Definition:** The total Sales generated from orders.
- **Calculation:** Sum of Product Prices.
- **Insight:** Helps assess the overall financial health of ShopNest.

#### 3.3 Number of Orders

- **Definition:** The total number of orders placed.
- **Calculation:** Count of unique order IDs.
- **Insight:** Measures order volume trends over time.

#### 3.4 Average Order Value (AOV)

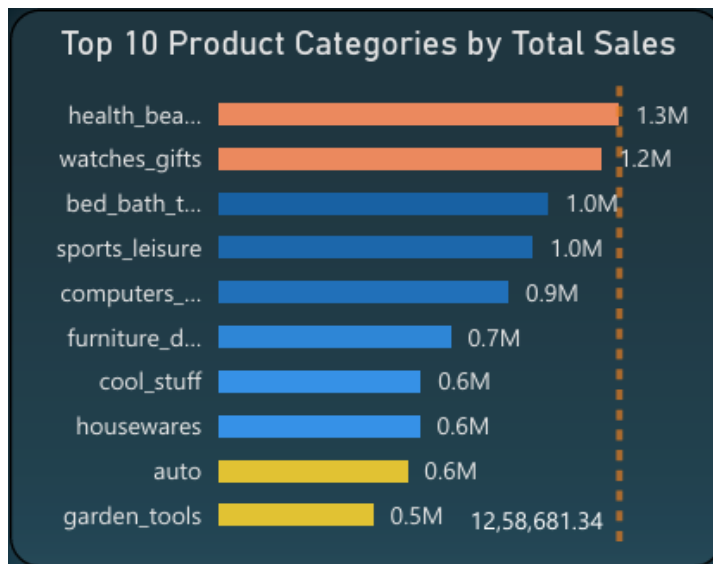
- **Definition:** The average revenue generated per order.
- **Calculation:** Total Revenue / Number of orders.
- **Insight:** Helps understand customer spending behavior.



## 4. Visualizations & Insights

### 4.1 Top 10 Product Categories by Total Sales

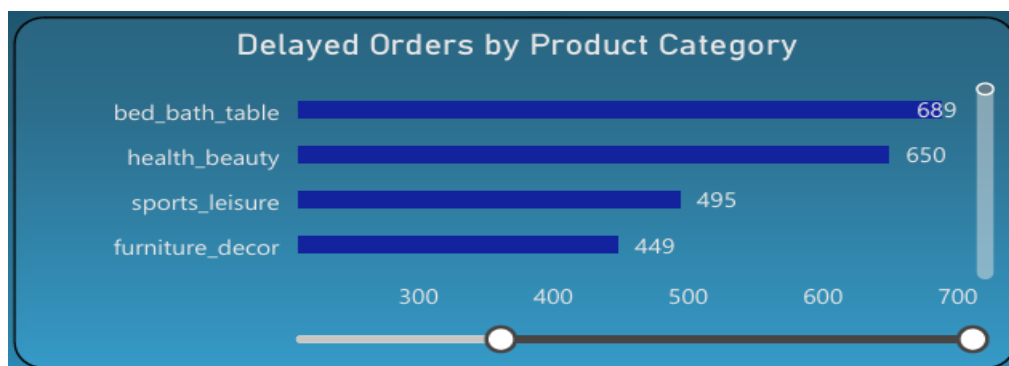
- **Question Statement:** Identify the top 10 product categories based on total sales.
- **Visualization:**



- **Insight:** The most popular product categories are “**Health & Beauty,**” “**Watches & Gifts,**” and “**Sports & Leisure.**” These categories drive significant revenue, indicating customer preferences.

### 4.2 Delayed Orders Analysis

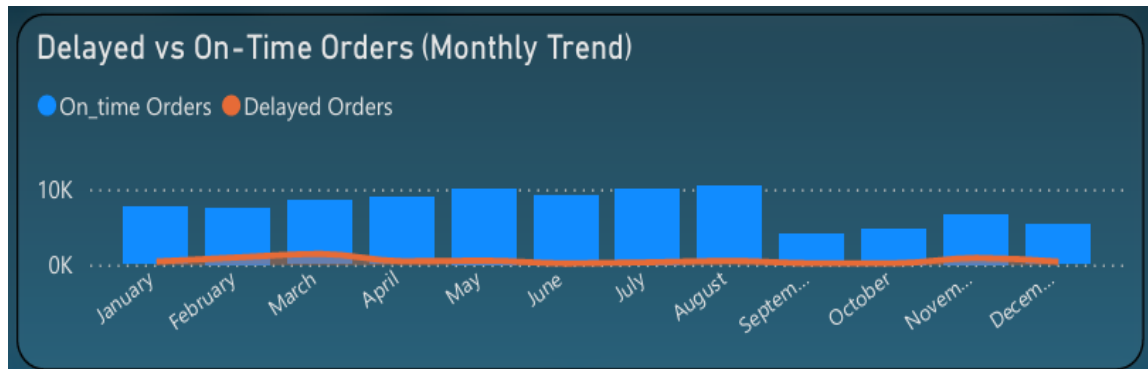
- **Question Statement:** Determine the number of delayed orders in each category.
- **Visualization:**



- **Insight:** The majority of the delays occur in categories like “**Bed & Bath table,**” “**Health & Beauty,**” and “**Furniture & Decor.**” This suggests potential supply chain or logistical challenges.

### 4.3 Monthly Comparison of Delayed vs. On-Time Orders

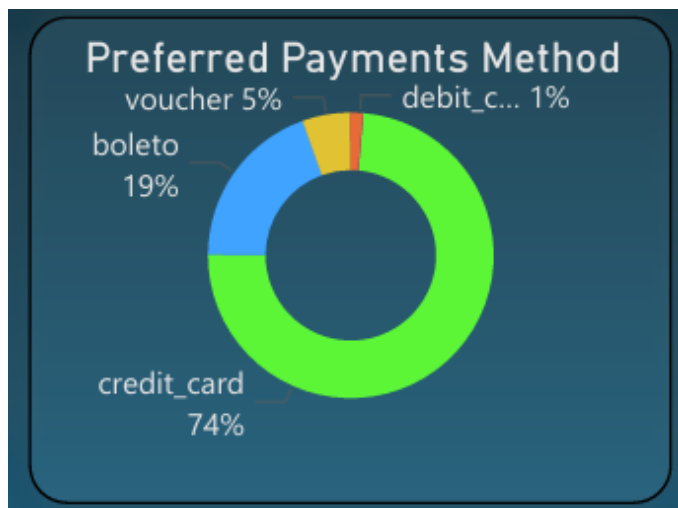
- **Question Statement:** Analyze the trend of delayed and on-time orders over each month.
- **Visualization:**



- **Insight:** Delays peak most in **March over 1.4k orders**, also in certain months particularly during holiday seasons, indicating potential capacity issues in logistics.

### 4.4 Payment Method Analysis

- **Question Statement:** Determine the most frequently used payment methods by customers.
- **Visualization:**



- **Insight:** **Credit cards** are the most commonly used payment method (**74%**), followed by **boleto (19%)**. Optimizing these payment options could enhance the customer experience.

#### 4.5 Product Rating Analysis

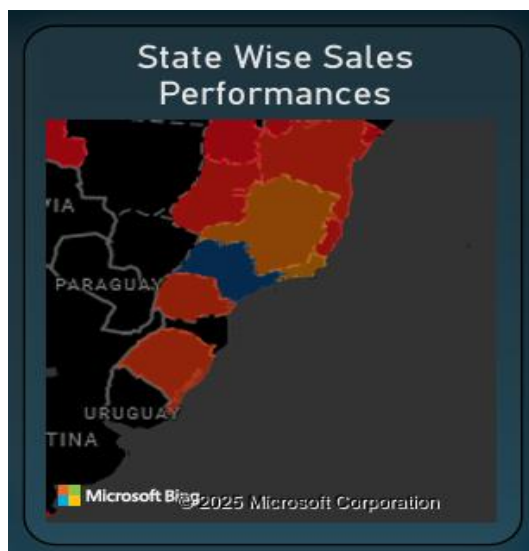
- **Question Statement:** Determine the top 10 highest-rated products and the bottom 10 lowest-rated products.
- **Visualization:**



- **Insight:** The highest-rated products have an average score of **4.5+**, whereas lower-rated products fall **below 3.5**, highlighting areas for improvement in product quality or customer satisfaction.

#### 4.6 State-wise Sales Performance

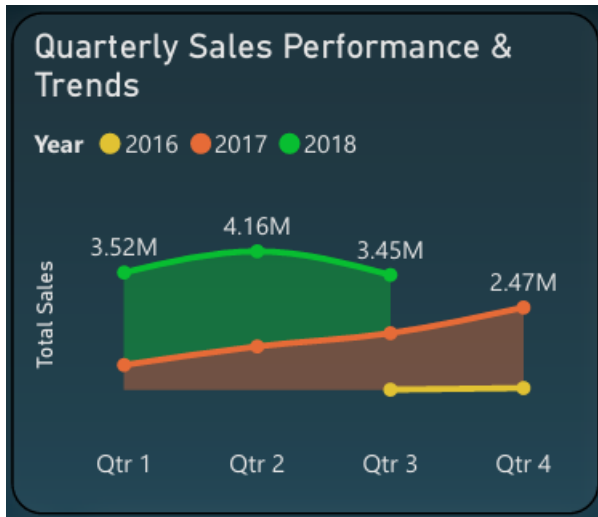
- **Question Statement:** Determine Which states contribute the most and least to sales.
- **Visualization:**



- **Insight:** High sales concentration in certain states like **SP, RJ**, while others like **RR, AP, AC** lag, suggesting targeted marketing strategies could improve sales in underperforming regions.

#### 4.7 Seasonal Sales Patterns (Quarterly Trends)

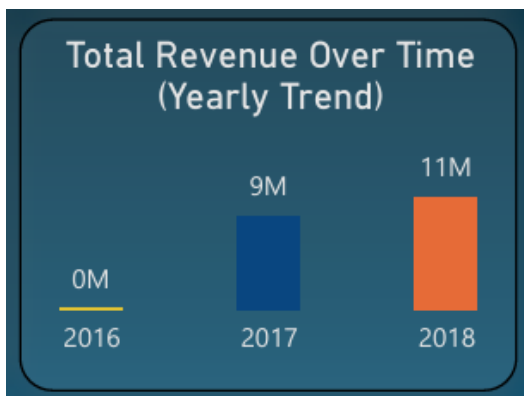
- **Question Statement:** Determine the seasonal patterns (Quarterly) or trends.
- **Visualization:**



- **Insight:** Sales raise in **2017 Q4** and **peaks in 2018 Q1 and Q2**, aligning with major shopping seasons. This trend helps plan inventory and marketing campaigns.

#### 4.8 Revenue Analysis (Yearly Trend)

- **Question Statement:** Determine How does total revenue change over time
- **Visualization:**



- **Insight:** Year-over-year revenue growth shows steady improvement with a notable increase from **9M in 2017 to 11M in 2018**, indicating business expansion and increased customer engagement.

## **5. Conclusion & Recommendations**

### **Findings:**

- “Health & Beauty” and “Watches & Gifts” dominate sales.
- Delayed orders affect certain product categories more than others.
- Credit card usage is the highest, suggesting convenience drives payment choices.
- Seasonal trends show strong sales in Q2 and Q3, necessitating stock and logistics planning.

### **Actionable Recommendations:**

- Optimize logistics to reduce delivery delays in key product categories.
- Introduce promotions for underperforming states to boost sales.
- Improve customer service and product quality in lower-rated items.
- Plan marketing campaigns in Q2 and Q3 to leverage peak sales periods.

## 6. Appendices

- Main Dashboard:



- Orde details for Drillthrough:

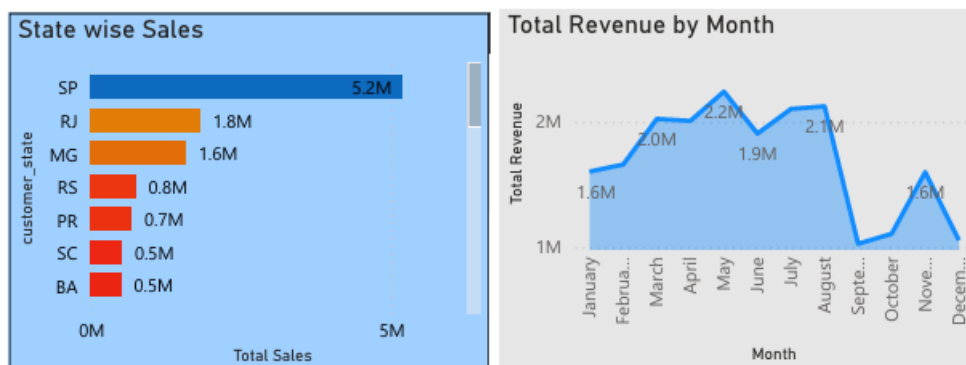
Order details for selected month

order_id	customer_id	order_purchase_timestamp	order_delivered_customer_date	order_estim...
b2997e1d7061605e9285496581d1fbd	9e83d47684eb1a58b1c31830f5de10ac	30-07-2018 09:08:00	02-10-2018 00:18:00	14-08-2018
a2b4be96b53022e18030c17ed437604d	ffa87b4246c4848711afb512bd511f161	22-07-2018 09:54:00	27-09-2018 02:24:00	17-08-2018
123681a0ffdb0051c674707c7e912ef	7930549f156ee2a2b01b0fc2fdd323063	15-07-2018 02:11:00	21-09-2018 23:46:00	06-08-2018
4a47b1154881f350d8696f717180d3	7c71fa0871e272a25eccc52af90595	23-07-2018 10:22:00	20-09-2018 16:08:00	13-08-2018
ae213a984c777b7a31e8c0f09f930c	cac4524e1e6714ef3f3dc324fc0f86cb	03-07-2018 22:13:00	19-09-2018 15:46:00	31-07-2018
0096668e5b068e9657a6f72094e58b4	b6fbaad4eb3a0794111683dca8122610	11-07-2018 13:33:00	17-09-2018 14:42:00	19-07-2018
238652e39c5fdd89a8d4477f532501	fc041ed47154c40f5545e20c1a1954	25-07-2018 09:15:00	17-09-2018 14:37:00	10-08-2018
84db93991ab9686533e9a0e0a0354beb6	c0789ee49fe7d5d93d5e412c14181ce	20-07-2018 13:14:00	17-09-2018 13:49:00	16-08-2018
6325af88a0611fc57055cb87dec11e	bfc24858928300e9b18e0d96637b8404	18-07-2018 13:40:00	17-09-2018 13:48:00	21-08-2018
84869ba3d1f4629b57ca40c491a842e6	8000d8c2201ad0577d5459c6325ccdc	27-07-2018 13:50:00	14-09-2018 17:11:00	13-08-2018
c005c973843746a08a6ea826af4ce0c0	71ac72b29860fdac58666426bbe6b4ba	29-07-2018 18:24:00	13-09-2018 21:22:00	21-08-2018
6282b84dc6369e1b6058285f860f4da4	e0fb20baf67827e3900f8b8e37b4a51	28-07-2018 09:22:00	08-09-2018 14:36:00	20-08-2018
a02ad7476a847e0453984ee8b8e6076	9a55894987e54a4047c4bf61210cd35d	25-07-2018 06:01:00	06-09-2018 11:41:00	20-08-2018
efb4d60fb4712070d0f27e9032a18b54	a96a2a926beca8de83f56e981126847	24-07-2018 12:45:00	03-09-2018 23:33:00	22-08-2018
3aa0359c1a9b0109bd14a0006be8284	079d3acd9329ed0f2b7f62e281a5855	30-07-2018 15:27:00	03-09-2018 20:31:00	27-08-2018
bb4eb3e71b30365a580e5a718bd8d1ae	e15fc5eebb46681049d287f9fde5419	24-07-2018 08:10:00	01-09-2018 01:22:00	22-08-2018
267519bde13b2d237af5731f1b86a9e	8d4632ec0b2442f4e3ad3d6e735e4c9	03-07-2018 16:37:00	01-09-2018 00:51:00	31-07-2018
0c38c51b8a775bcfb8a0e340be3cece	1b84b28ab60427100f70a7232df0f94	29-07-2018 17:56:00	01-09-2018 00:34:00	20-08-2018
5f2aa0f89bdf0d14237066f139c2a4	04f8e9cd7c2f918568c5b4e934a56316	17-07-2018 01:02:00	28-08-2018 21:18:00	07-08-2018
50b3cc3a81862663a395451c8928e19	acbd1a3a266aacb3bc900d3ad428666f	11-07-2018 20:27:00	28-08-2018 15:26:00	09-08-2018
1323da2f3c3dab9c6e0f68d170f0816	30a740aa49694c824429bba81acd607b	09-07-2018 19:45:00	28-08-2018 14:58:00	06-08-2018
d3310038bfb991c02501a510225283	5db1604d37be97a2b413c219be3b8c0e	30-07-2018 14:26:00	28-08-2018 01:07:00	23-08-2018
a336de4bbd836a89f9cb2a5b58ed2578	e5b8fa3d79376c3a36aeb7b6b413c647	20-07-2018 17:22:00	28-08-2018 00:31:00	10-08-2018
6a8074244958b34abe3e949e948bb999	c90b8aa7d4de59f804b33f6f8706c7ad	22-07-2018 20:00:00	27-08-2018 22:14:00	21-08-2018
73e85a295c3028a2283eb8182a8ac56b	6d75b739e1547399c38335db5a099405	30-07-2018 15:43:00	27-08-2018 21:54:00	22-08-2018

Number of Order Displayed

316

- ToolTips of State wise Sales and monthly revenue:





- **Calculation Formulas:** Detailed breakdowns of how KPIs and metrics were calculated.

#### **Measures Created Using Dax:**

1. AOV = [Total Revenue]/COUNT(orders\_dataset[order\_id])
2. Avg Review Score = AVERAGE(order\_reviews\_dataset[review\_score])
3. Delayed Orders = COUNTROWS(FILTER(orders\_dataset, orders\_dataset[order\_delivered\_customer\_date].[Date] > orders\_dataset[order\_estimated\_delivery\_date].[Date]))
4. On\_time Orders = COUNTROWS(FILTER(orders\_dataset, orders\_dataset[order\_delivered\_customer\_date].[Date] <= orders\_dataset[order\_estimated\_delivery\_date].[Date]))
5. Total Revenue = SUM(order\_payments\_dataset[payment\_value])
6. Total Sales = SUM(order\_items\_dataset[price])

#### **Columns Created Using Dax:**

1. Delivery time Status =  
IF(orders\_dataset[order\_delivered\_customer\_date].[Date] > orders\_dataset[order\_estimated\_delivery\_date].[Date], "Delayed", "On-time")

- **Key Work Areas:**

**#ETL Automation:** Streamlined the data pipeline with Power Query Editor to clean, transform, and structure data for accuracy and relevance.

**#DAX Calculations:** Built calculated measures for key metrics, including, Total Revenue, Total Sales, Average Order Value (AOV), Delayed orders, On-Time orders, Average Review Score (ratings) to track performance and customer satisfaction.

**#Interactive Dashboard Design:** Created user-friendly visuals (combo charts, trend lines, bar charts, pie charts and map visuals) to highlight:

- Revenue and Orders Trends over time
- Category, State wise & Seasonal Performance metrics
- Delivery Efficiency insights

**#Dynamic Slicers & Buttons:** Added navigating buttons and also slicers for Year, Month and Payment Methods allowing leadership to filter data in real-time for customized insights.

This document provides a structured analysis of ShopNest's business performance and identifies opportunities for improvement based on data-driven decision-making with ETL automation, DAX modelling, and dynamic dashboards for strategic insights.

- Akunuru Abhishek

- 12/02/2025