



# E-COMMERCE

Group 15 (Brainiacs)

# Overview



KEY QUESTIONS  
AND  
OBJECTIVES

INSIGHTS

CONCLUSION

# Overview

This project contains the analysis and visualization of sales data sourced from Kaggle. The analysis aims to uncover insights and answer critical business questions to guide decision-making processes.

## Tool Used

**Power BI:** For data cleaning, data visualization and dashboard creation.

## Data Source

The sales data used in this analysis is sourced from [Online Sales Dataset - Popular Marketplace Data \(kaggle.com\)](https://www.kaggle.com/datasets/alexm1703/popular-marketplace-data). It includes various attributes related to sales transactions, units sold, unit prices, and product categories and payment method.

# KEY QUESTIONS AND OBJECTIVES

- The primary objective of this analysis is to extract actionable insights from the sales data. Some key questions addressed through the visualization include:

## **1. Sales Performance:**

1. Which products are the top sellers?
2. What is the sales trend over different time periods (monthly, quarterly, annually)?
3. Which regions generate the highest sales?
4. What is the total number of units sold?
5. What is the revenue trend over number of units sold ?

## **2. Product Analysis:**

1. What are the most and least profitable products?
2. How do product categories perform in terms of revenue?
3. What product were bought most using each payment method?

## **3. Payment Channels Performance:**

1. Which payment channels (e.g., Credit card, Debit card, PayPal) are the most effective?
2. Which payment methods are used most by each region?

# Sales Report

80,568

Sum of Total Revenue

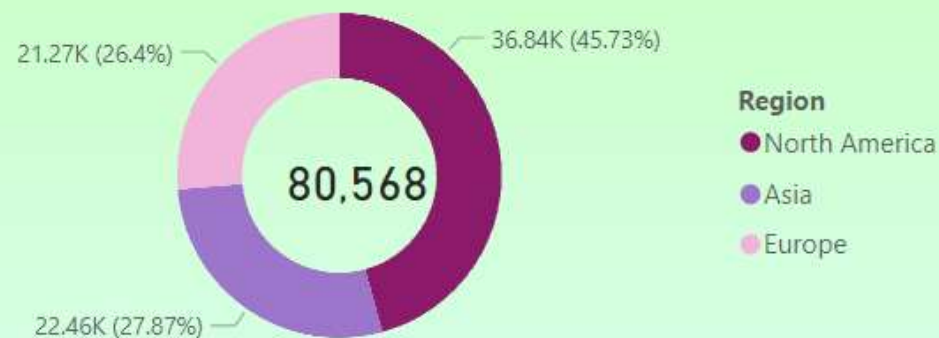
518

Sum of Units Sold

236.40

Average of Unit Price

## Total Revenue by Region



## Revenue Trend over time



Credit Card

Debit Card

PayPal

## Total Revenue by Product Category



## Sum of Total Revenue by Units Sold



# Sales Report

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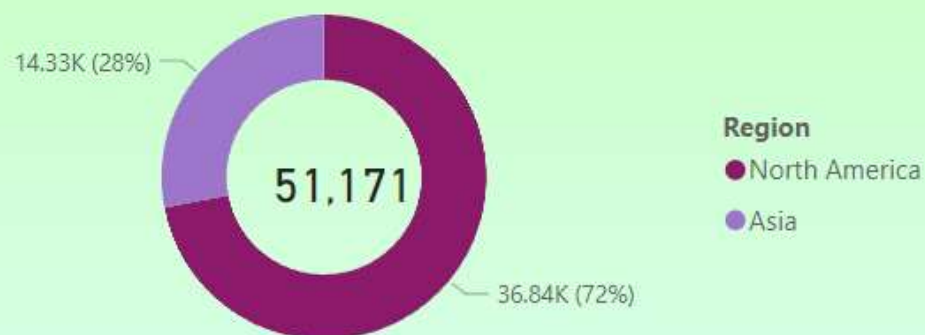
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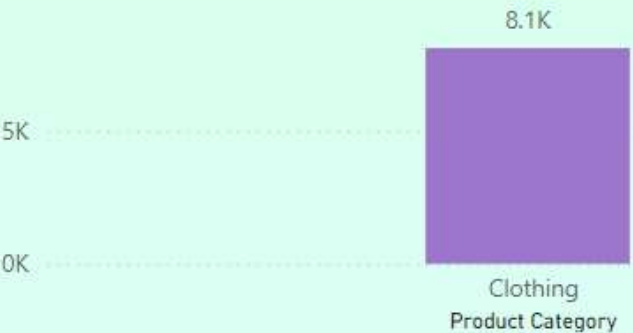


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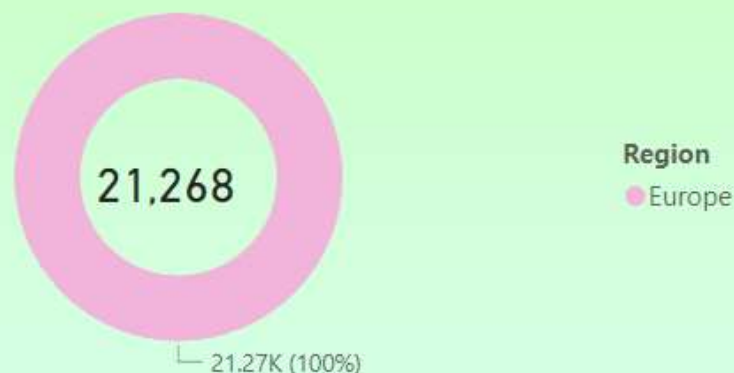
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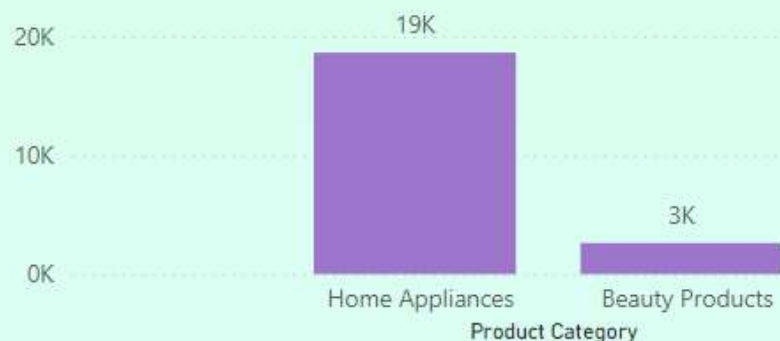


Credit Card

Debit Card

PayPal

Total Revenue by Product Category



Sum of Total Revenue by Units Sold





# INSIGHTS

*The visualizations created in Power BI provided several key insights, including:*

## **1. Top Products and Sales Trends:**

1. Electronics and Home Appliances consistently lead in revenue.
2. Sales exhibit a strong seasonal trend, with peaks during the holiday season.
3. Singular purchases brought in more revenue than multi-purchases.

## **Regional Performance:**

1. North America outperforms other regions, contributing to ~46% of total sales.
2. Asia and Europe made up the remaining 54% ( with Asia having 1.47% more sales that Europe)

## **1. Payment Method Performance:**

1. Credit card generated the most total revenue being the most popular payment method. (making up 63% of revenue)
2. Debit card brought in the least revenue even while being the only payment method being used in Asia (only ~10% of revenue)

# CONCLUSION

In conclusion, our sales data analysis has provided us with valuable insights into our performance, product trends, and payment method usage. By leveraging these findings, we can make informed decisions to enhance our sales strategies, optimize resource allocation, and drive growth.

THANK YOU