

Business Insights Report

Key Insights

1. Total Revenue

- The total revenue generated from all transactions in the dataset amount is \$689,995.56.

2. Revenue by Region

- South Africa** comes in first place contributing **31.8%** of the revenue, which is **219,352.56** dollars, indicating a strong customer base in this region.
- Europe** is the second-highest revenue-generating region with **24.1%** at **166,254.63** dollars, followed by **North America (22.1%)** and **Asia (22.0%)**.
- The relatively balanced revenue distribution across regions suggests a diverse global presence with opportunities for growth in **Asia** and **North America**.
- Since they contribute significantly to revenue, marketing and retention initiatives can prioritize **South Africa** and **Europe**.

3. Top-Selling Product Categories

- The highest revenue of **192,147.47 dollars** earns by **books**, It had contributed significantly to the total sales.
- Electronics** with revenue of **180,783.50 dollars** holds the second rank, and it showcasing the popularity of tech-related products.
- Clothing** and **Home Decor** follows closely with revenues of **166,170.66 dollars** and **150,893.93 dollars**, respectively.
- These four categories represent the primary revenue makers for the business.
- While improving pricing and promotions in clothing and home décor might improve their performance, concentrating on growing inventory and marketing initiatives for books and electronics can further raise revenue growth.

4. Most Purchased Products

- ActiveWear Smartwatch** is the most purchased unit, indicating strong customer demand by selling **100 units** as the highest.
- Relatively, **SoundWave Headphones** and **HomeSense Desk Lamp** were sold at **97** and **81 units**, respectively, representing their popularity.
- Products from different categories, including **electronics**, **home decor**, and **books**, dominate the top 10 list, reflecting diverse customer preferences.
- The existence of goods like the **TechPro Textbook** and **SoundWave Cookbook** emphasizes the importance of lifestyle and educational items.
- Maintaining strong sales volume can be achieved by focusing on inventories for these high-performing products.

5. Transactions Over Time

- January 2024** was the month with the most number of transactions (**107**), which can be attributed to strong post-holiday shopping or new year promotions.

- There is a more consistent level of transactions through most months, with a slight dip in **June (69)** and **November (57)**.
- The **December** numbers show a recovery of sorts (**78 transactions**), which could be attributed to pre-holiday shopping.
- The trends show peaks in customer activity in **January** and **December**; therefore, targeted marketing and promotional campaigns can capitalize on this.
- Perhaps targeting the lower transaction periods, such as **November**, with seasonal offers or campaigns could help smooth out the transaction consistency throughout the year.

6. Peak Average Sales by Hour

- The peak average sales occur at **11 PM (23:00)**, with an average transaction value of **831.46 dollars**.
- Late-night shopping activity might indicate a preference for convenience, possibly from working professionals or online shoppers.
- This insight highlights the importance of ensuring website or store availability during late hours to accommodate high-value customers.
- Marketing campaigns and promotions scheduled for the late evening could further capitalize on this peak shopping period.
- Deeper understanding of the tastes and purchase patterns of customers may be obtained by examining their profiles that were active during this hour.

7. Top Customers by Spending

- **Paul Parsons** is the biggest spender, accounting for **10,673.87 dollars** of the total revenue, whereas **Bruce Rhodes** is second with **8,040.39 dollars**.
- The top 10 customers are responsible for a large share of the total revenue, which underscores the role of high-value customers for business continuity.
- Keeping such loyal, high spending customers as customers and offering them personal offers and loyalty programs may only increase the revenue.
- There are ways to encourage repeat purchases and increase the **customer lifetime value (CLV)** through targeted marketing campaigns.
- This paper recommends that future work should attempt to capture and analyse the purchasing behaviour of these customers so that product recommendations and services can be better tailored to meet their needs.