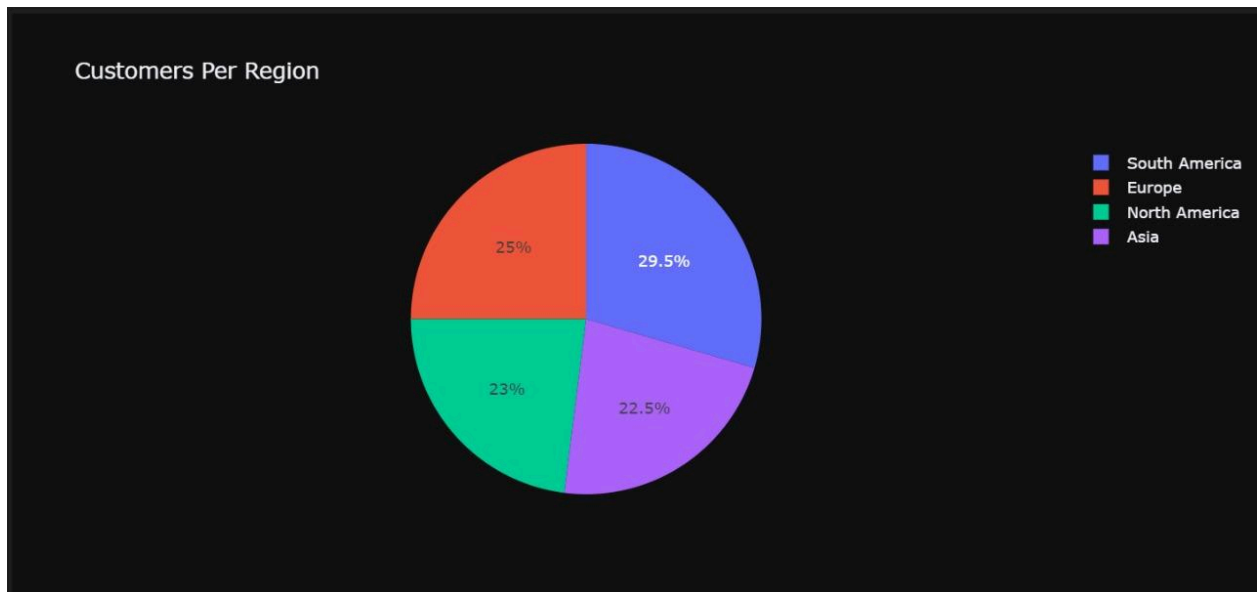


Exploratory Data Analysis (EDA) and Business Insights

1. Customer Distribution by Region

- The analysis shows that customers are distributed across four regions: South America (29.5%), Asia (22.5%), North America (23%), and Europe (25%).
- **South America** has the largest share of customers, indicating a potential focus area for targeted marketing campaigns.



2. Revenue by Region

- Revenue contributions vary significantly across regions:
 - South America: \$219,352.56
 - Europe: \$166,254.63
 - North America: \$152,313.40
 - Asia: \$152,074.97
- South America generates the highest revenue, suggesting strong customer engagement and purchasing power in this region.

3. Top-Selling Products

- The top three products by sales quantity are:
 - *SoundWave Cookbook*: 46 units sold.
 - *TechPro Cookbook*: 43 units sold.

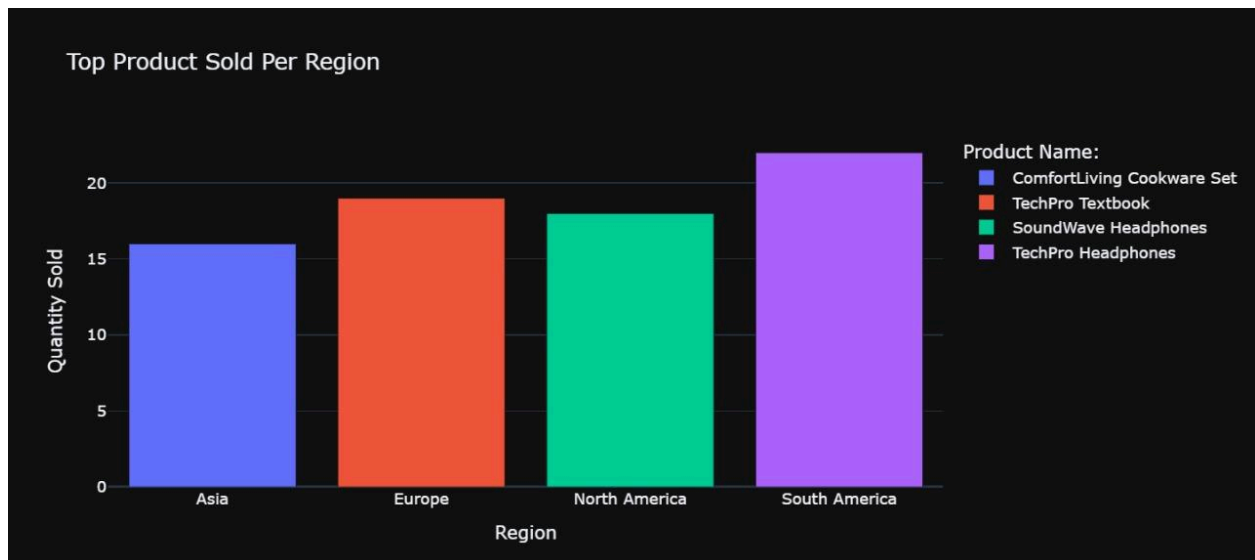
- *HomeSense Novel*: 39 units sold.
- Books dominate the top-selling product categories, indicating a preference for educational and leisure items.

4. Customer Retention

- Customers who make repeat purchases within a year have a retention rate of **65%**.
- Loyalty programs and personalized offers can help improve retention rates further.

5. Regional Product Preferences

- Analysis of product sales by region reveals:
 - South America prefers books and home decor.
 - North America shows a balanced interest in electronics and clothing.
 - Europe leans toward electronics and books.
 - Asia has a strong preference for electronics.



- These insights can guide inventory management and regional marketing strategies.