

## Insights

### 1. Customer Purchase Behaviour Patterns:

The data presents an interesting contrast in customer purchase behaviour. On average, transactions contain 2-3 units, with a mean of 2.537 units per transaction. However, there is significant variability in transaction values, with a mean of \$690 and a standard deviation of \$493. This variability indicates the existence of different customer segments: value buyers who make smaller, more frequent purchases, and premium buyers who make high-value purchases. The near-zero correlation (-0.009) of quantity with respect to price confirms this, that is, customers are not bound by prices while deciding on how many units to buy but are instead deriving great value from the brand or product for them to choose.

### 2. Regional Market Dynamics:

South America is the best-performing region, with \$219,353 in revenue, showing strength in the Books category (\$69,752) and a strong Electronics presence (\$58,846). Although the purchase quantities are similar (2.59 units per transaction vs. the global mean of 2.537), South America has the highest average transaction value at \$721.55, which suggests a willingness to spend more on premium offerings. This means consumer behaviour in South America is not the same elsewhere, with a higher level of spending on premium products, such as Books and Electronics. In this respect, regional variations in consumer behaviour provide valuable insights to customize marketing strategies and product offerings to various markets.

### 3. Product Portfolio Performance:

The Electronics category is the second-highest revenue generator, accounting for \$180,784 in total revenue. However, success in this category is concentrated within a few product lines rather than being spread throughout the entire product line. For instance, the ActiveWear Smartwatch alone accounts for \$39,097, meaning that the category's success is highly concentrated within one product line. This concentrated success suggests that the brand's market position is strongest in high-tech wearables and premium audio equipment rather than throughout the broader electronics segment. This may imply calling for specific and targeted product developments and marketing towards strengthening the stronghold in those markets of high demands.

### 4. Customer Lifecycle Value Distribution:

The contrast between repeat and single-use customer sales is striking. While repeat customers generate \$683,655 in revenue, the single-use customer sales total a mere \$6,341. This 108:1 ratio shows how successful the retention strategies are for this company and further suggests that its products are eliciting high satisfaction levels among customers to result in repeat sales. The very unusual ratio further shows that the business model is not just successful at bringing in customers but is specifically strong at creating valuable, long-term relationships.

### 5. Temporal Market Behavior:

This suggests that seasonality is affecting customer behavior and market performance, as indicated by the sales and signup data. Interestingly, the association of customer signups with sales indicates that timing plays a critical role in both customer acquisition and the realization of long-term value. The data shows that how a purchase is timed from the first purchase may induce future buying behavior, further underlining the need for implementing seasonal marketing campaigns and promotional strategies.