#### Informe de Análisis Automatizado

#### Agrupamiento (K-Means):

Alta rotación: 1804 (41.1%)Alta promoción: 1268 (28.9%)Alta rotación (2): 1312 (29.9%)

#### Valores atípicos:

- Z-score (por columna):

? Units Returned: 0.6%

? Units Sold: 0.2%

? Price: 0.0%

? Revenue: 0.0%

? Discount: 0.0%

- IQR (por columna):

? Units Returned: 7.2%

? Units Sold: 0.9%

? Price: 0.0%

? Revenue: 0.0%

? Discount: 0.0%

- Isolation Forest (por fila): 5.0% de registros atípicos.

#### Correlaciones destacadas (|r|):

- Price? Revenue: 0.977

- Revenue ? Units Sold: 0.210

- Units Returned ? Units Sold: 0.117

- Price ? Units Sold: 0.014

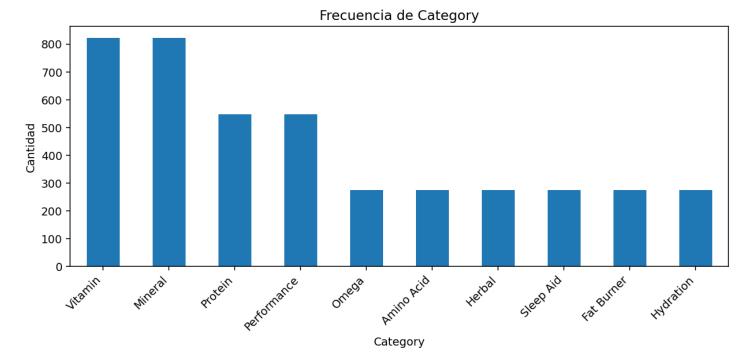
- Discount? Revenue: 0.013

#### Sugerencias basadas en detección de atípicos:

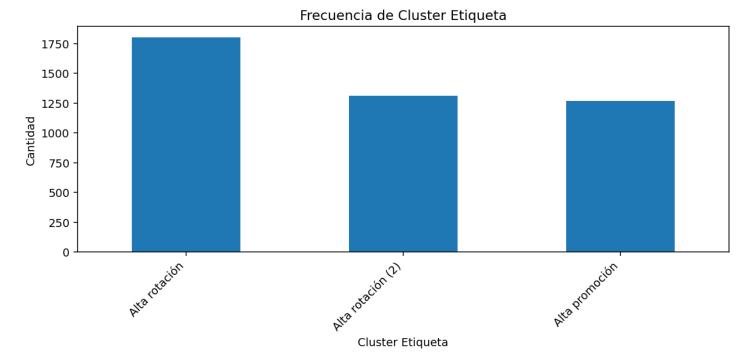
- IQR detectó numerosos extremos. Revisa outliers por fuente de dato (errores de captura) o aplica límites por percentil.
- Isolation Forest marcó múltiples registros. Prioriza inspección manual de esos casos y valida reglas de negocio.

#### Sugerencias basadas en correlaciones fuertes:

- Se detectaron relaciones muy fuertes. Considera eliminar/combinar variables para evitar multicolinealidad:
  - ? Price ? Revenue: r = 0.98
- Si vas a modelar, evalúa VIF/regularización o selecciona una sola variable por grupo correlacionado.

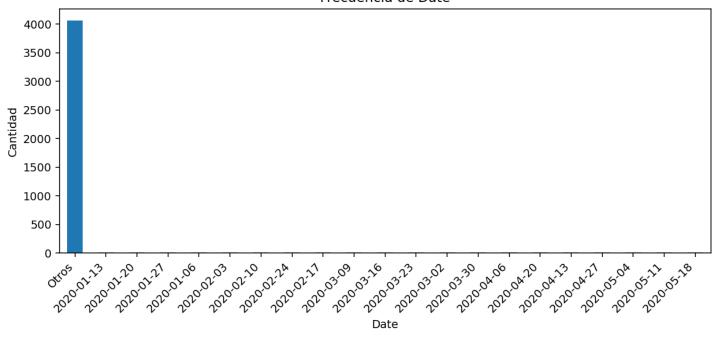


barras\_Category.png

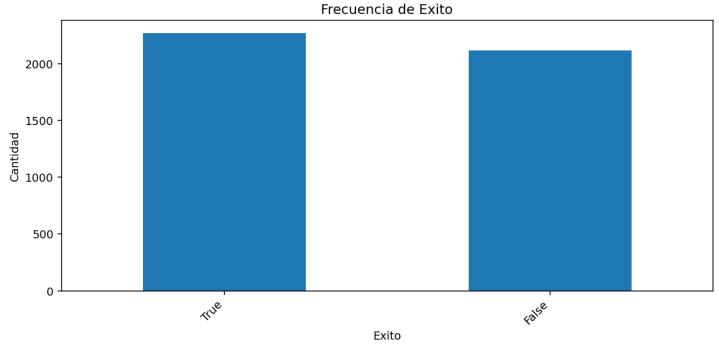


barras\_Cluster\_Etiqueta.png

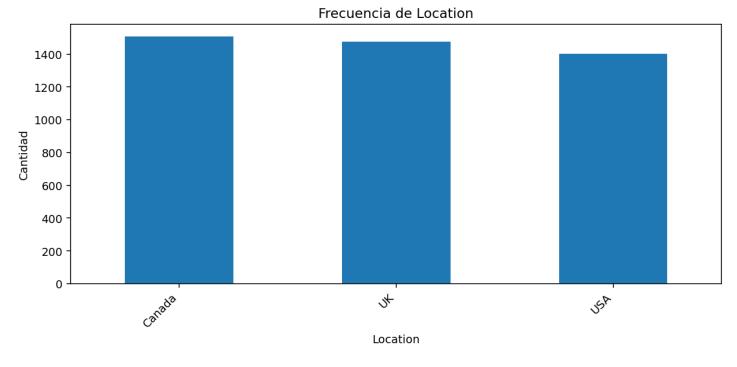
#### Frecuencia de Date



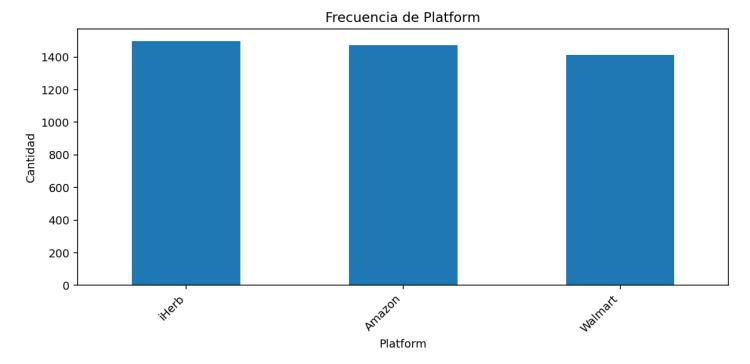
barras\_Date.png



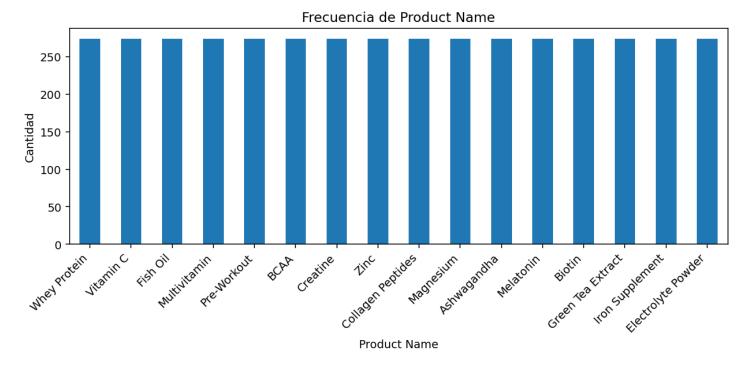
barras\_Exito.png



barras\_Location.png

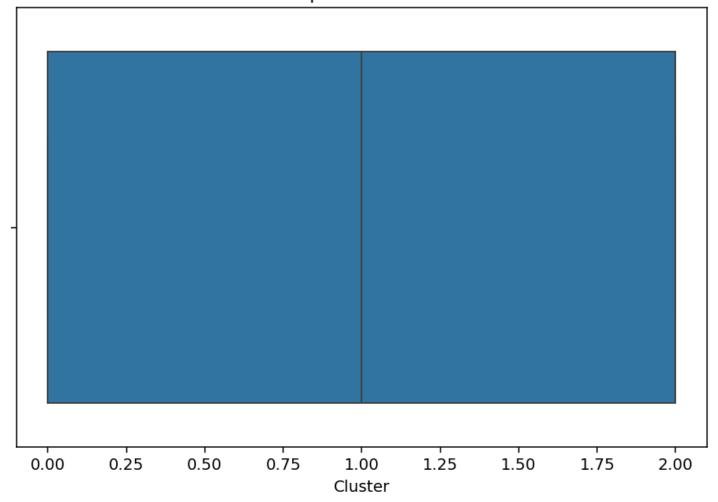


barras\_Platform.png



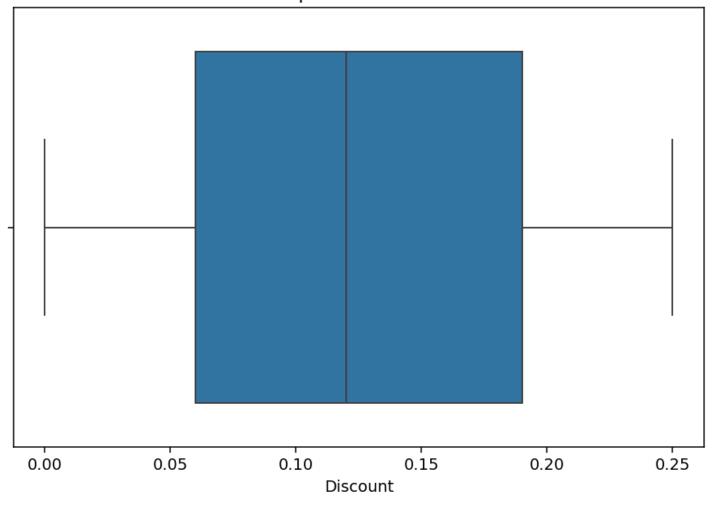
barras\_Product\_Name.png

## Boxplot de Cluster



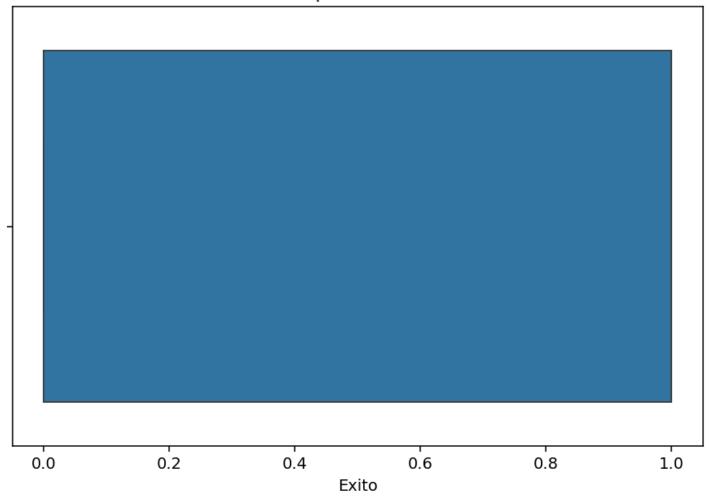
boxplot\_Cluster.png

## Boxplot de Discount



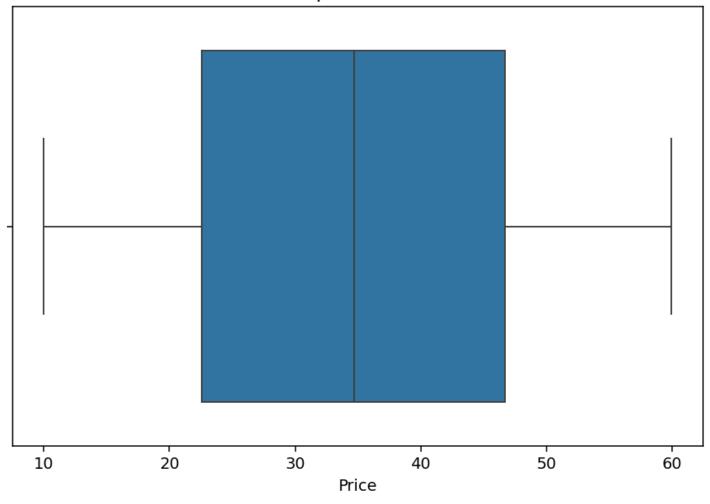
boxplot\_Discount.png

## Boxplot de Exito



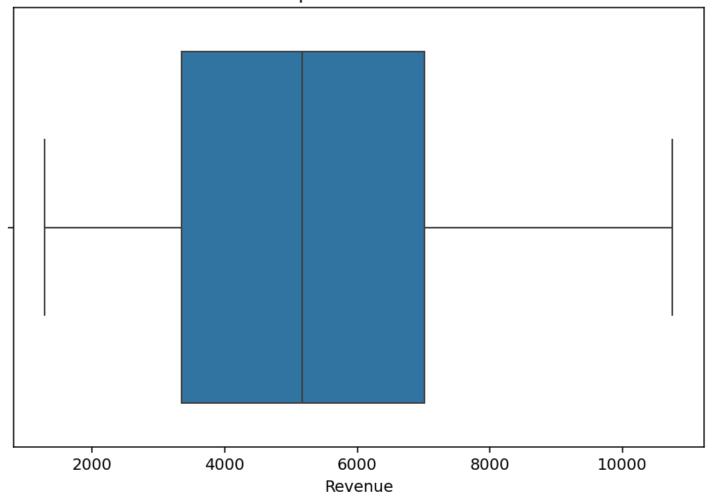
boxplot\_Exito.png

## Boxplot de Price



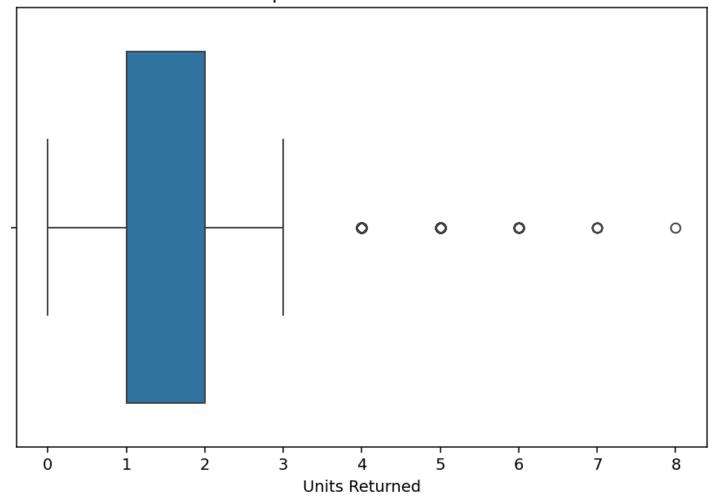
boxplot\_Price.png

### Boxplot de Revenue



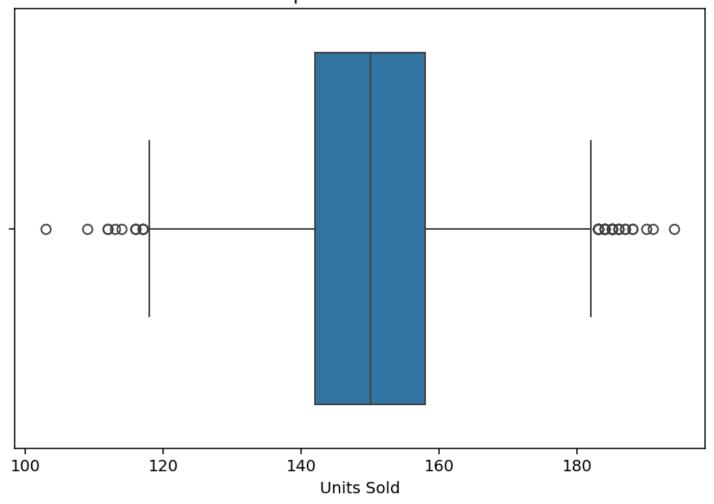
boxplot\_Revenue.png

### Boxplot de Units Returned



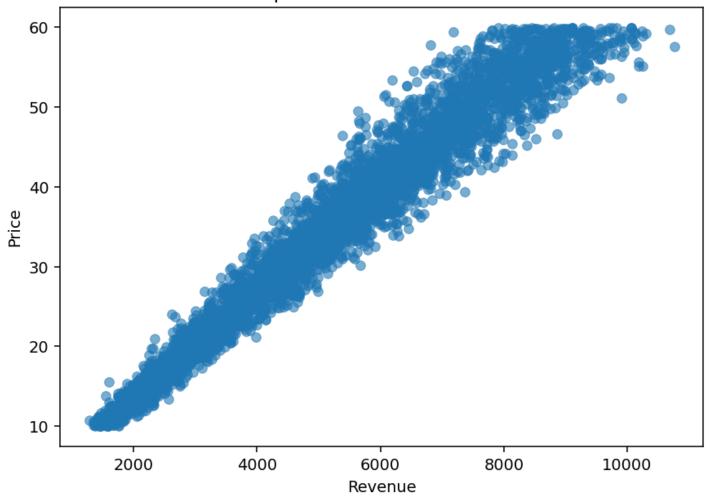
boxplot\_Units\_Returned.png

## Boxplot de Units Sold



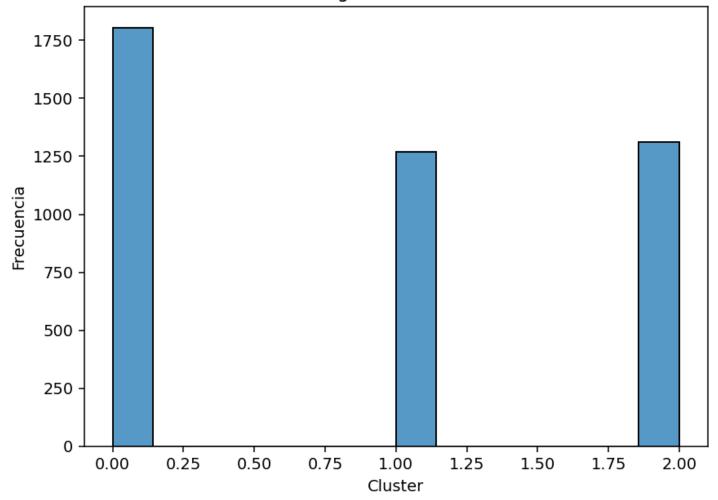
boxplot\_Units\_Sold.png

Dispersión: Revenue vs Price



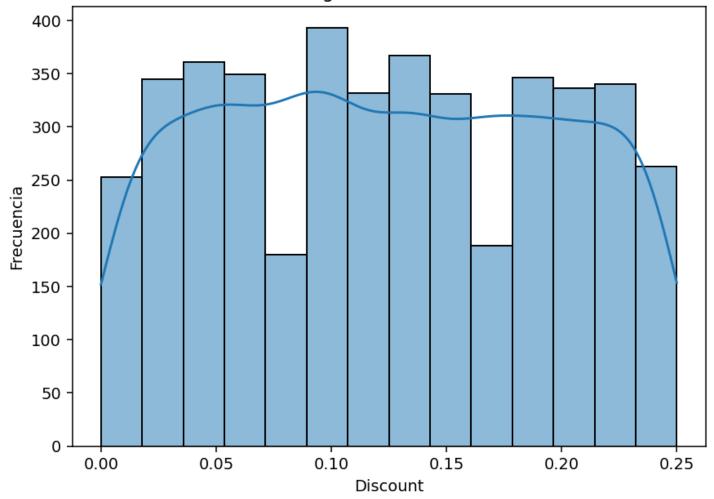
dispersion\_Revenue\_vs\_Price.png

## Histograma de Cluster



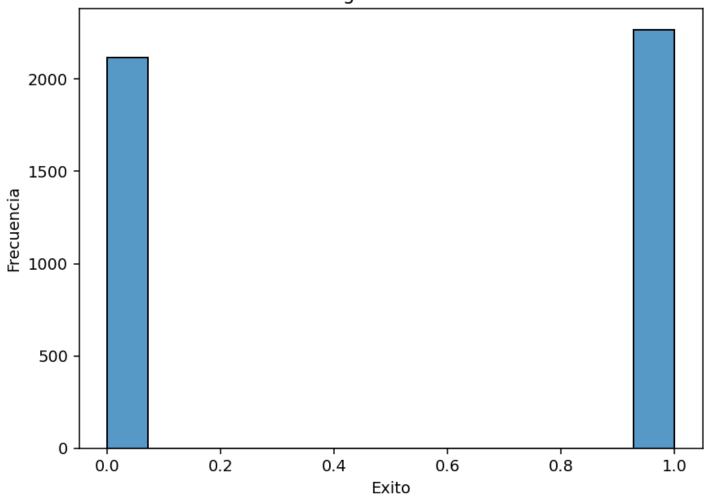
histograma\_Cluster.png

## Histograma de Discount



histograma\_Discount.png

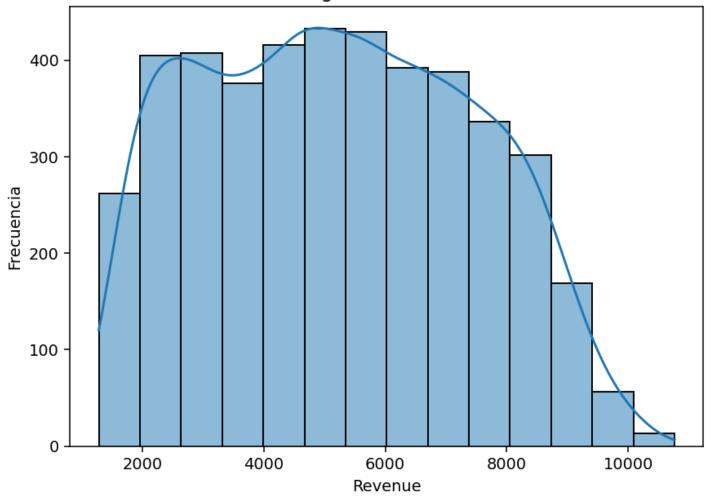
## Histograma de Exito



histograma\_Exito.png

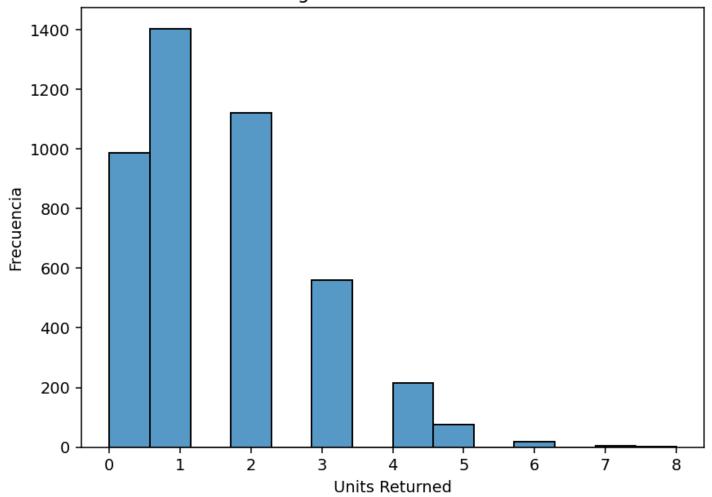


### Histograma de Revenue



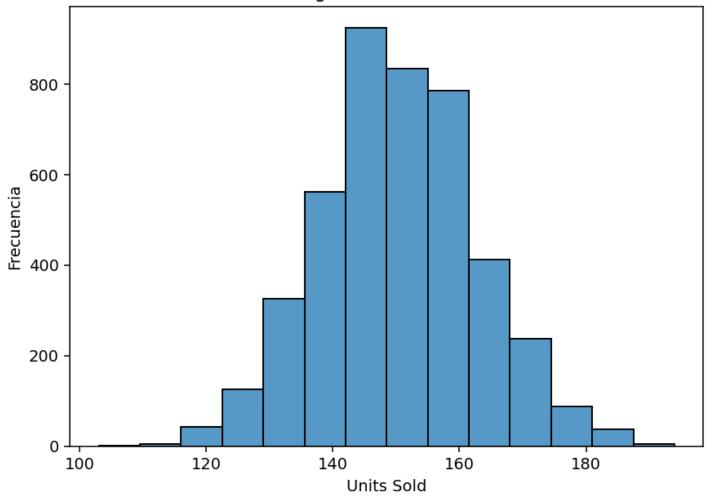
histograma\_Revenue.png

### Histograma de Units Returned



histograma\_Units\_Returned.png

# Histograma de Units Sold



histograma\_Units\_Sold.png

