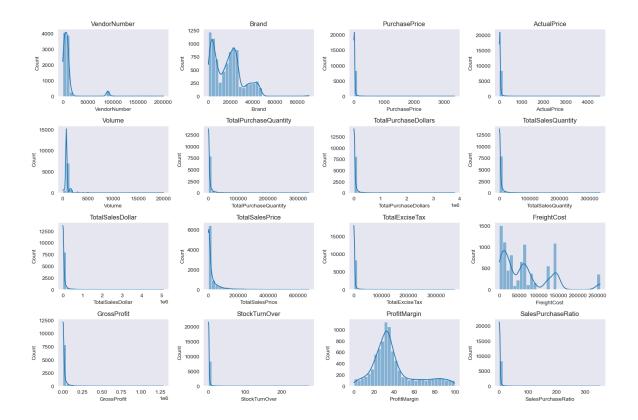
# **Vendor-Sales** Summery

Some more insights

	PurchasePrice	
count	10692.000000	1
mean	24.385303	
std	109.269375	
min	0.360000	
25%	6.840000	
50%	10.455000	
75%	19.482500	
max	5681.810000	

PurchasePrice	ActualPrice	Volume	TotalPurchaseQuantity	TotalPurchaseDollars
10692.000000	10692.000000	10692.000000	10692.000000	1.069200e+04
24.385303	35.643671	847.360550	3140.886831	3.010669e+04
109.269375	148.246016	664.309212	11095.086769	1.230678e+05
0.360000	0.490000	50.000000	1.000000	7.100000e-01
6.840000	10.990000	750.000000	36.000000	4.534575e+02
10.455000	15.990000	750.000000	262.000000	3.655465e+03
19.482500	28.990000	750.000000	1975.750000	2.073824e+04
5681.810000	7499.990000	20000.000000	337660.000000	3.811252e+06

TotalSalesQuantity	TotalSalesDollar	TotalSalesPrice	TotalExciseTax	FreightCost	GrossProfit	StockTurnOver	ProfitMargin	SalesPurchaseRatio
10692.000000	1.069200e+04	10692.000000	10692.000000	10692.000000	1.069200e+04	10692.000000	10514.000000	10692.000000
3077.482136	4.223907e+04	18793.783627	1774.226259	61433.763214	1.213238e+04	1.706793	-15.885227	2.504390
10952.851391	1.676553e+05	44952.773386	10975.582240	60938.458032	4.622434e+04	6.020460	447.289882	8.459067
0.000000	0.000000e+00	0.000000	0.000000	0.090000	-5.200278e+04	0.000000	-23730.638953	0.000000
33.000000	7.292200e+02	289.710000	4.800000	14069.870000	5.292000e+01	0.807229	15.353839	1.153729
261.000000	5.298045e+03	2857.800000	46.570000	50293.620000	1.399640e+03	0.981529	30.778375	1.436894
1929.250000	2.839692e+04	16059.562500	418.650000	79528.990000	8.660200e+03	1.039342	40.210967	1.665449
334939.000000	5.101920e+06	672819.310000	368242.800000	257032.070000	1.290668e+06	274.500000	99.716657	352.928571



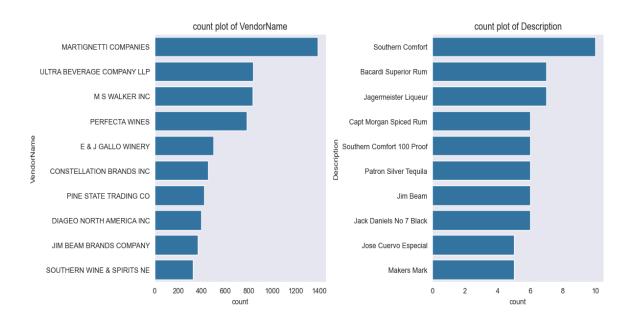
# **Summary Static Insights**

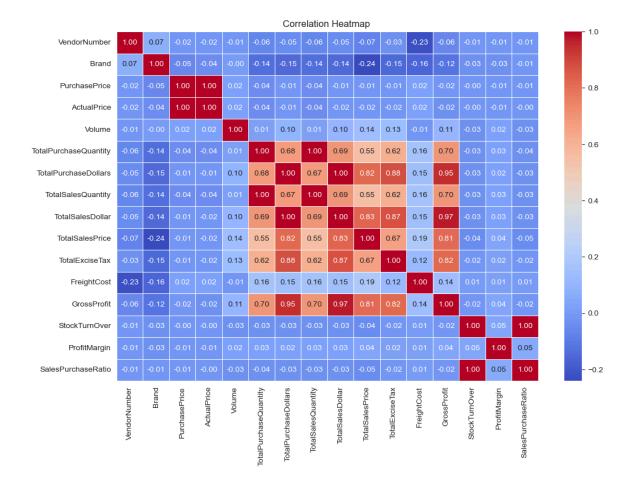
#### negative & Zero Values

- Gross profit: Minimum value is -5.2002.78, indicating loss. Some products or transactions may be selling at loss due to high cost or selling at discounts lower than the product price.
- Profit Margin: Has a minimum null which suggests a case where revenue is zero or even lower than cost. and except for null the minimum is -23730.638953, which also indicates a loss, may the costs exceed the revenue.
- Total Sales Quantity & sales Dollars : minimum value are 0 , meaning some products were purchased but never sold .This could be slow moving or obsolete stock .

**Outliers Indicated by High Standard Deviations;** 

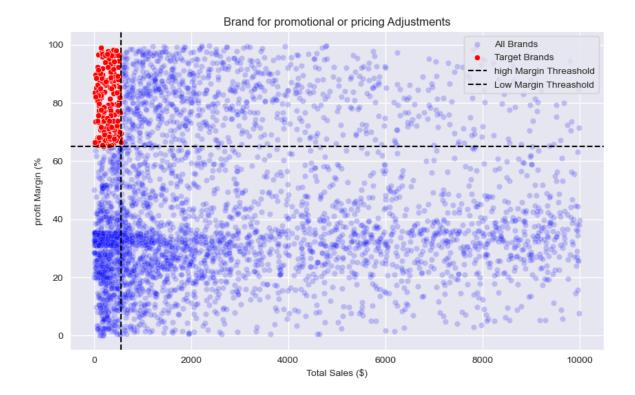
- purchase & actual prices :the max values(5681.81 & 7499.99) are significantly higher the mean (24.39 & 35.64) indicating potential premium products
  - freight Cost :huge variation , from 0.09 to 257032.75 suggests logistics inefficiencies or bulk shipments .
- Stock turnover :ranges from 0 to 274.5 implying some products sells extremely fast while others remain in stock indefinitely . stock more than 1 indicate sold quality is higher then purchased quality due to either sales are being fulfilled from older stock





## **Correlation Insight**

- purchasePrice has weak correlation with TotalsalesDollars(-0.01) and GrossProfit(-0.016) suggestting that price variation do not significantly impact sales revenue or profit
  - strong correlation between total purchase quantity and total sales quantity (0.999), confirming efficient inventory turnover.
- Negative correlation between profit margin & total sales price (-0.179)
   suggests that as sales price increases, margins decrease, possibly
   due to competitive pricing pressures.
- StockTurnover has weak negative correlation with both GrossProfit
   (-0.038) abd profitMargine (-0.055) indicating the faster Turnover does not necessarily result in higher profitability



## vendor and brand demonstrate highest sales performance

## VendorName

	6 7000100107
<ul> <li>DIAGEO NORTH AMERICA INC</li> </ul>	6.799010e+07
<ul> <li>MARTIGNETTI COMPANIES</li> </ul>	3.933036e+07
<ul> <li>PERNOD RICARD USA</li> </ul>	3.206320e+07
<ul> <li>JIM BEAM BRANDS COMPANY</li> </ul>	3.142302e+07
<ul> <li>BACARDI USA INC</li> </ul>	2.485482e+07
<ul> <li>CONSTELLATION BRANDS INC</li> </ul>	2.421875e+07
<ul><li>E &amp; J GALLO WINERY</li></ul>	1.839990e+07
<ul> <li>BROWN-FORMAN CORP</li> </ul>	1.824723e+07
o ULTRA BEVERAGE COMPANY L	LP 1.650254e+07
<ul><li>M S WALKER INC</li></ul>	1.470646e+07

## Brands

<ul> <li>Jack Daniels No 7 Black</li> </ul>	7964746.76
<ul> <li>Tito's Handmade Vodka</li> </ul>	7399657.58
<ul> <li>Grey Goose Vodka</li> </ul>	7209608.06
<ul> <li>Capt Morgan Spiced Rum</li> </ul>	6356320.62
	6244752 03

Jameson Irish Whiskey

Ketel One Vodka

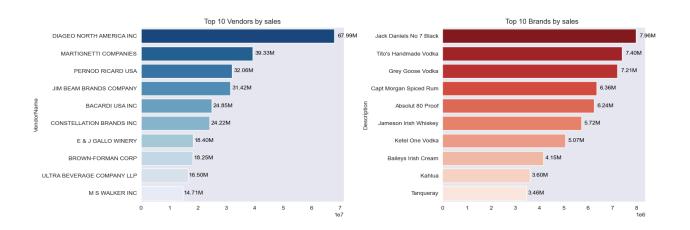
Baileys Irish Cream

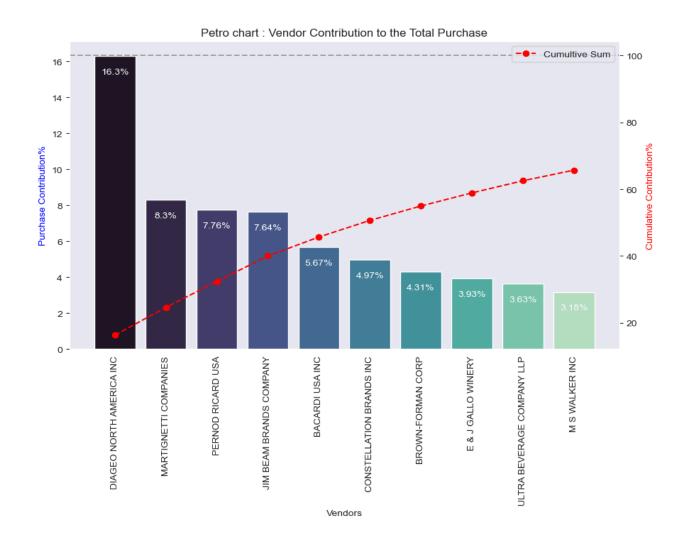
Kahlua

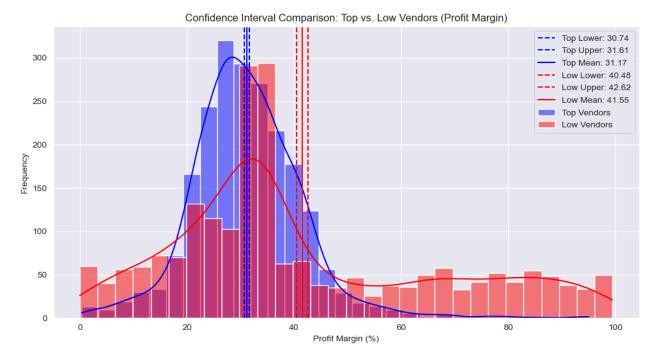
Tanqueray

5715759.69 5070083.56 4150122.07 3604858.66

3456697.90







Top 10 Vendor's Purchase Contribution (%)

