STARK SOLUTIONS

ANNUAL REPORT

Stark Solutions

Annual Sales Performance Analysis for Stark Solutions | US Toy Retailer

PREPARED BY

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Title

Annual Sales Performance Analysis for Stark Solutions | US Toy Retailer

Context

Stark Solutions, a multi-state toy retailer in the US, operated with limited visibility into its sales performance across different regions and product lines. This project aimed to transform dispersed sales data into a centralized, dynamic reporting system to drive regional strategy and inventory planning.

Problem / Question

How can Stark Solutions gain a clear understanding of its geographic and category performance to optimize

inventory distribution, maximize revenue from top-performing states, and capitalize on seasonal sales trends in the highly competitive toy retail market?

Tools Used

· Power BI: End-to-end dashboard development and visualization
· DAX: For time intelligence calculations and performance metrics
· Power Query: For data transformation and cleaning of raw sales data

Process Walk-through

1. Data Collection & Cleaning: Connected to the raw transactional database. Used Power Query to standardize state names, product categories, and date formats.
2. Data Modeling: Built a star schema

model with fact tables for sales and dimension tables for Date, Product, Location (State), and Customer.
3. DAX Calculations:

· Total Sales = SUM(Sales[Revenue])
· Sales vs Target = DIVIDE([Total Sales], [Target]) - 1
· YoY Growth = DIVIDE([Total Sales CY], [Total Sales PY]) - 1
· Top State Contribution = CALCULATE([Total Sales], ALLSELECTED(States))

4. Visualization Development: Created interactive reports focusing on geographic performance, category analysis, and seasonal trend identification.

Key Findings

· Geographic Analysis: California, Texas, and New York contributed over 50% of total annual revenue, indicating high market concentration.
· Category Performance: "Educational Toys" and "Action Figures" were the top-performing categories, showing consistent growth throughout the year.
· Seasonal Trends: A significant 35% of annual sales occurred during the Q4 holiday season (October-December), highlighting critical dependency on holiday shopping.
· Underperforming Regions: Several Midwestern states showed potential for growth, performing below the national average despite favorable demographics.

Visuals with a Purpose

· Map: Color-coded by sales volume to instantly identify top-performing and underperforming states.

· Line Chart with Monthly Sales Trend: To visualize seasonal peaks and troughs throughout the year.
· Stacked Bar Chart (Sales by Category & State): To show category performance across different geographic markets.
· KPIs for YoY Growth and Target Achievement: For quick performance assessment against goals.

Main Takeaway

The dashboard revealed Stark Solutions' over-reliance on both coastal states and the holiday season. The key strategic insight was the need to develop targeted marketing campaigns in the underperforming Midwestern states and

to diversify revenue streams by promoting off-season sales through loyalty programs and events.

What I Learned from this Case Study

· The importance of geographic visualization in retail analytics for national companies.
· How to effectively analyze and present seasonal trends to inform inventory and marketing planning.
· The power of combining multiple dimensions (state + category + time) to uncover hidden growth opportunities.

Reflection and Next Steps

· Reflection: The project successfully identified major revenue drivers and gaps. The initial analysis could be enhanced by integrating customer demographic data.
· Next Steps:
  1. Integrate customer demographic data to enable segmentation analysis by age group and income level.
  2. Add inventory turnover metrics by state to optimize stock levels and reduce carrying costs.
  3. Develop predictive models for holiday season demand to improve supply chain planning.

Invite Feedback

Retail analytics requires both depth and clarity! I'd appreciate your perspective:

· Which finding (geographic, category, or seasonal) do you think is most actionable for the business?
· How could the visualizations be improved to better tell the story of regional performance?
· What other dimensions would you want
to explore in this toy retail context?

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Item Sales Summary Report

Cover Page | **Sales** | Profit | Total Sales & Cost Flow | State Province Details | Stock Items Details | Total Sales & Quantity Relation

Filters

Employee: All

Buying Package: All

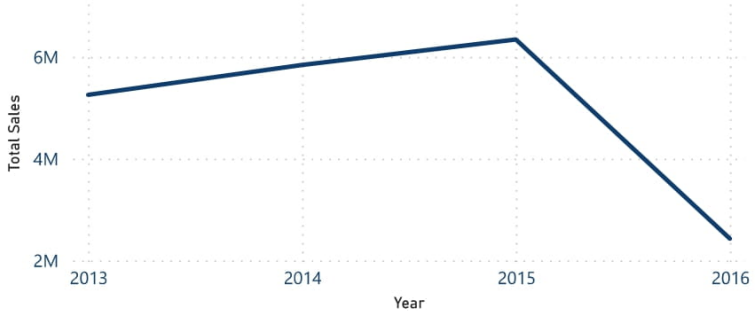
Buying Group: All

State Province: All

Category: All

Total Sales	Quantity	Total Chiller Quantity	Total Dry Quantity
20M	1.03M	14.35K	1.01M

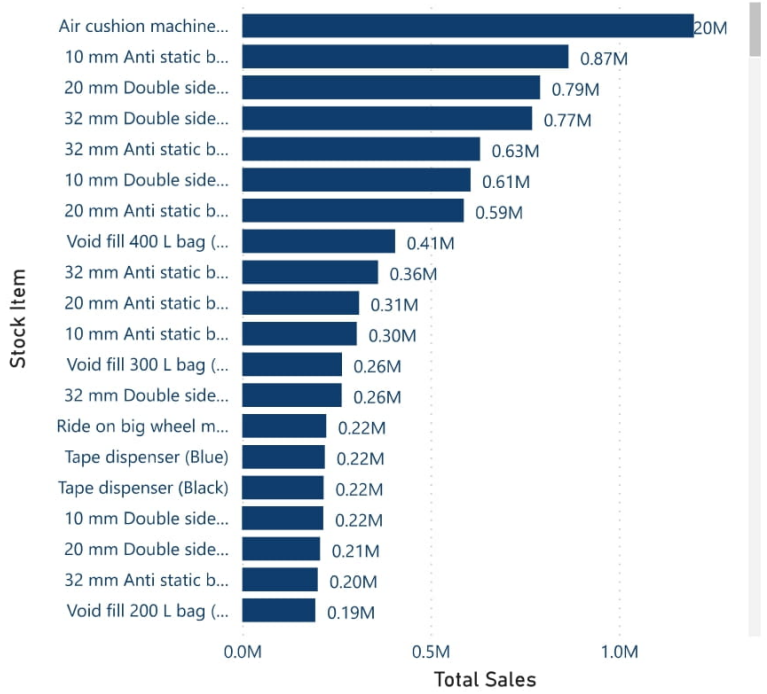
Total Sales and Cost by Year



Sales By State

State Province	Total Sales	Total Quantity	Total Profit	Sales Perfrom.
California	8,831,112	461064	4,434,686.05	Excellent
Washington	4,227,220	210392	2,093,723.70	Excellent
Alaska	3,002,074	159538	1,484,469.75	Average
Oregon	2,251,097	112041	1,121,762.90	Average
Nevada	1,251,230	70342	627,297.30	Poor
Hawaii	316,856	15293	161,952.00	Poor
Total	**19,879,589**	**1028670**	**9,923,891.70**	**Amazing**

Total Sales and Total Quantity by Stock Item



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Item Sales Summary Report

Filters

Employee: All

Buying Package: All

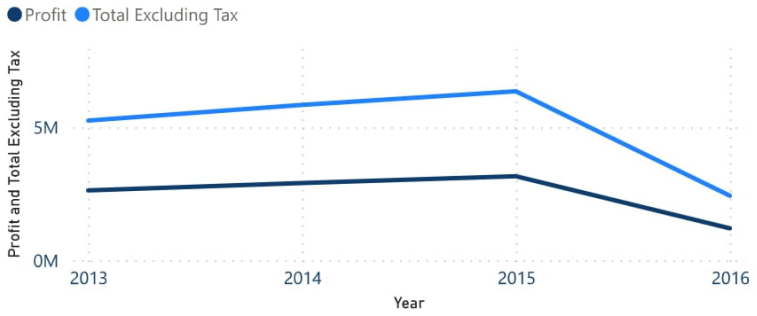
Buying Group: All

State Province: All

Category: All

Total Sales	Cost	Total Profit	Profability
20M	9.96M	9.92M	49.92%

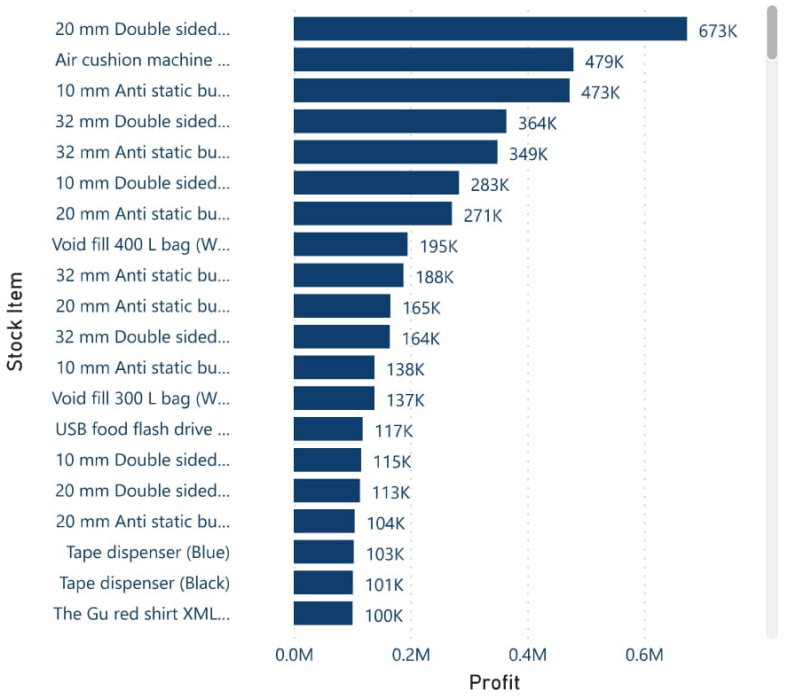
Profit and Total Excluding Sales by Year



Profit By State

State Province	Total Profit	Total Quantity	Total Cost	profability
Alaska	1,484,469.75	159538	1,517,604.25	49.45%
California	4,434,686.05	461064	4,396,425.95	50.22%
Hawaii	161,952.00	15293	154,904.00	51.11%
Nevada	627,297.30	70342	623,932.70	50.13%
Oregon	1,121,762.90	112041	1,129,334.10	49.83%
Washington	2,093,723.70	210392	2,133,496.30	49.53%
Total	**9,923,891.70**	**1028670**	**9,955,697.30**	**49.92%**

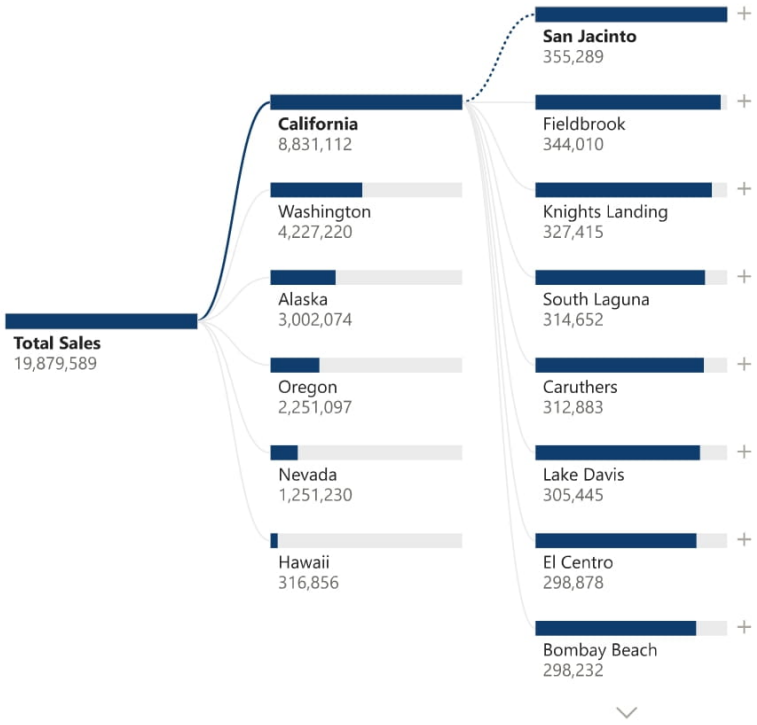
Total Sales and Profit by Stock Item



Total Sales flow

State Province: California

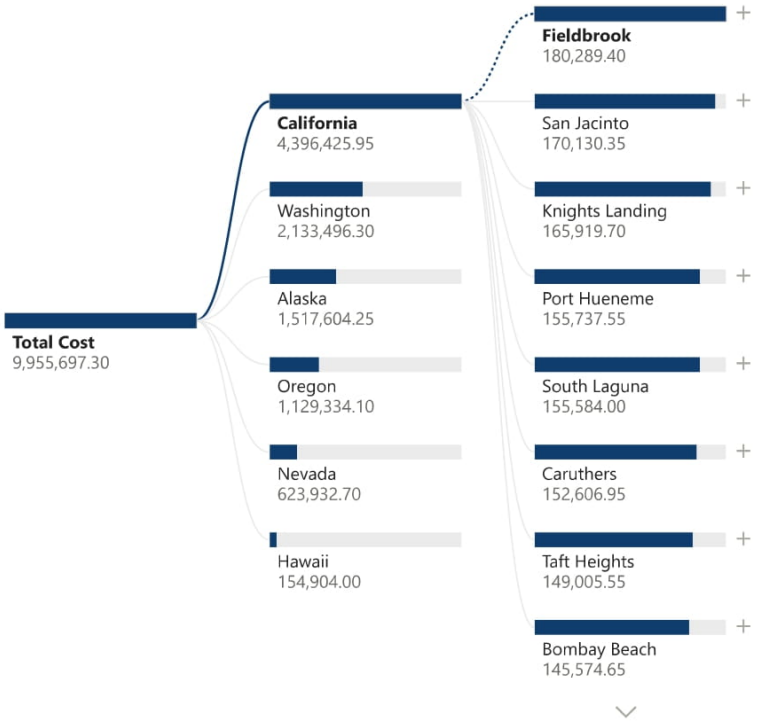
City

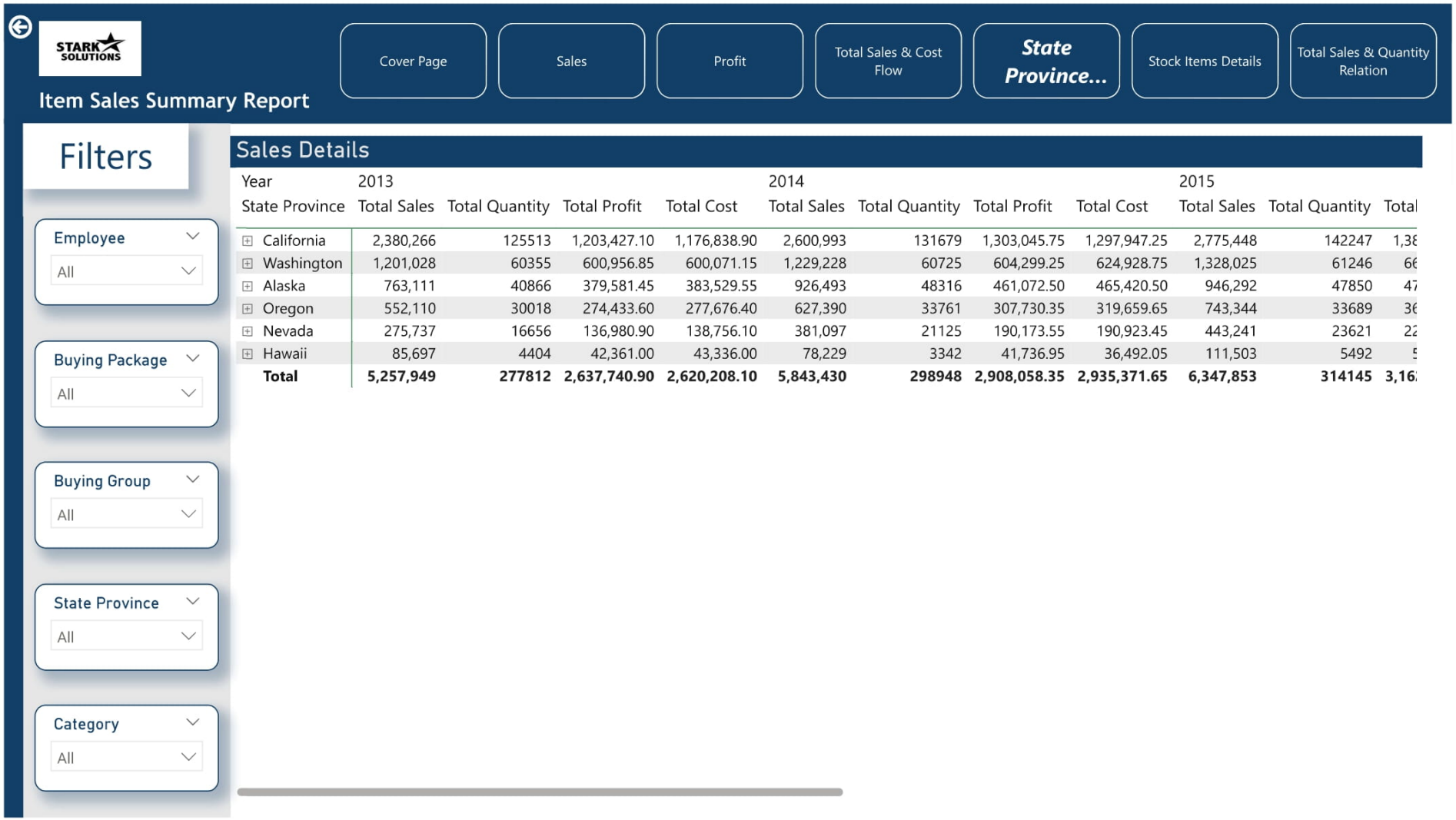


Total Cost flow

State Province: California

City





Year	2013				2014				2015		
State Province	Total Sales	Total Quantity	Total Profit	Total Cost	Total Sales	Total Quantity	Total Profit	Total Cost	Total Sales	Total Quantity	Total
California	2,380,266	125513	1,203,427.10	1,176,838.90	2,600,993	131679	1,303,045.75	1,297,947.25	2,775,448	142247	1,38
Washington	1,201,028	60355	600,956.85	600,071.15	1,229,228	60725	604,299.25	624,928.75	1,328,025	61246	66
Alaska	763,111	40866	379,581.45	383,529.55	926,493	48316	461,072.50	465,420.50	946,292	47850	47
Oregon	552,110	30018	274,433.60	277,676.40	627,390	33761	307,730.35	319,659.65	743,344	33689	36
Nevada	275,737	16656	136,980.90	138,756.10	381,097	21125	190,173.55	190,923.45	443,241	23621	22
Hawaii	85,697	4404	42,361.00	43,336.00	78,229	3342	41,736.95	36,492.05	111,503	5492	5
Total	**5,257,949**	**277812**	**2,637,740.90**	**2,620,208.10**	**5,843,430**	**298948**	**2,908,058.35**	**2,935,371.65**	**6,347,853**	**314145**	**3,16**

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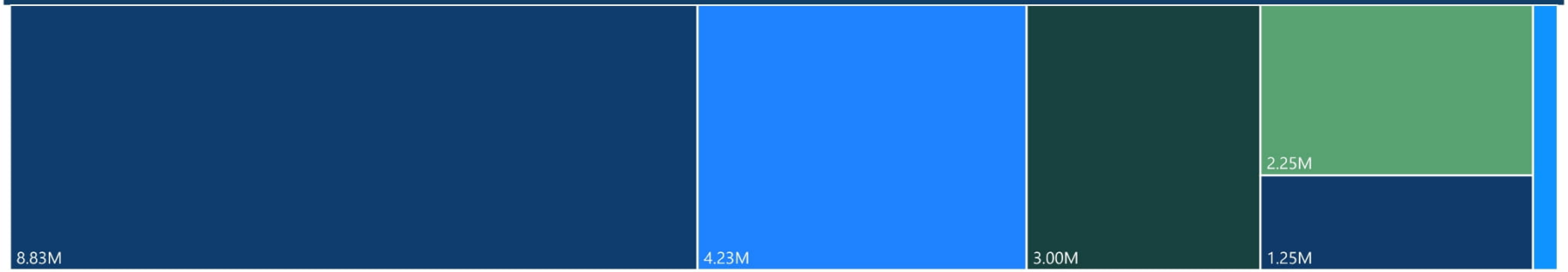
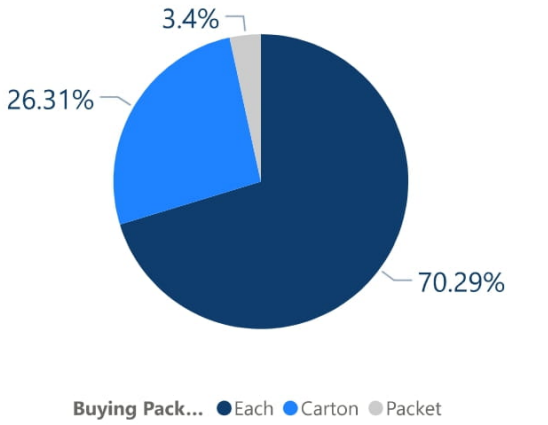
Total Sales and Cogs by State Province



Quantity Per City

City	Sum of Quantity	Sum of Profit	Sum of Tax Rate	Total Cost	profability	Total Sales
Akhiok	30999	259,554.30	10935	283,182.70	47.82%	542,737
Amanda Park	12221	117,443.85	5235	130,569.15	47.35%	248,013
Arrowbear Lake	16704	143,197.70	6120	133,191.30	51.81%	276,389
Arrowhead Highlands	14553	153,284.90	5375	143,350.10	51.67%	296,635
Avenal	13899	138,042.35	5700	138,896.65	49.85%	276,939
Biggs	8627	82,191.05	3015	83,718.95	49.54%	165,910
Biorka	11006	90,078.10	4020	79,280.90	53.19%	169,359
Bombay Beach	16565	152,657.35	6090	145,574.65	51.19%	298,232
Caruthers	16587	160,276.05	6335	152,606.95	51.23%	312,883
Caselton	15274	118,872.30	5600	130,062.70	47.75%	248,935
Total	**1028670**	**9,923,891.70**	**395375**	**9,955,697.30**	**49.92%**	**19,879,589**

Sum of Quantity by Buying Package



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Key influencers Top segments

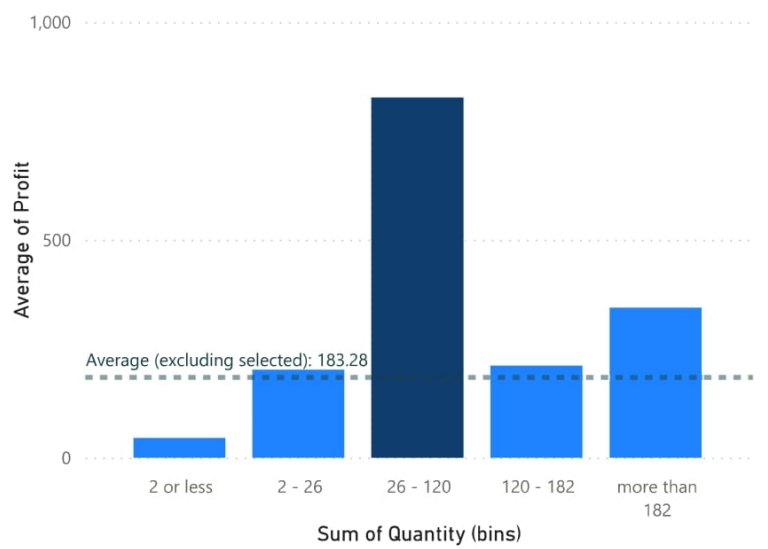
What influences Profit to Increase ?

When...

....the average of Profit increases by

Sum of Quantity is 26 - 120 — 660.5

Profit is more likely to increase when Sum of Quantity is 26 - 120 than otherwise (on average).



Only show values that are influencers