

HUSKIE MOTOR CORPORATIONS PRELIMINARY ANALYSIS

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INTRODUCTION

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This report aims to provide comprehensive insights into Huskie Motor Corporation's (HMC) overall performance by leveraging Data analytics. As a growing entity in the global automotive industry, HMC has engaged D&A Consulting to delve into its extensive data repository. The analysis will focus on key performance areas to support strategic decision-making and enhance HMC's competitive edge.

Key Performance Areas

- **Overall Performance Analysis**
 - **Global Performance:** Assess HMC's global performance, breaking down data by regions, models, and brands to identify strengths and areas for improvement.
 - **Model and Brand Analysis:** Examine the performance of different models and brands to determine which are driving growth and which require strategic adjustments.
- **Financial Analysis**
 - **Contribution Margin:** Conduct a detailed analysis of the contribution margin, segmented by model and sales channel, to understand profitability drivers.
 - **Cost Variability Trends:** Identify trends in variable costs to uncover areas where cost efficiency can be improved.
- **Operations Analysis**
 - **Best Sellers:** Identify HMC's top-selling models in terms of both sales volume and profitability to recognize key market preferences.
 - **Inventory Turnover:** Analyze the average number of days a car remains on the lot before sale, providing insights into inventory management and sales efficiency.
- **Forecasting**
 - **Sales and Contribution Margin Forecast:** Apply advanced statistical methods to predict sales volume and contribution margin for the next four quarters, aiding in proactive strategic planning.

AGENDA

- Executive Summary
- Introduction
- Overall Performance Analysis
- Financial Analysis
- Operations Analytics
- Forecast
- Recommendations

EXECUTIVE SUMMARY & RECOMMENDATIONS

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Key Findings:

- **Regional Performance:** North America, particularly the United States, emerges as a dominant market for HMC, contributing significantly to total gross sales. However, opportunities for market expansion exist in regions such as Jordan, Brazil, and Columbia.
- **Brand Strength:** Apachete leads as HMC's flagship brand, driving substantial gross sales and profit. However, strategic efforts are needed to enhance brand prominence and market penetration for other brands within the portfolio.
- **Sales Channel Optimization:** Rental channels demonstrate robust profitability, highlighting the importance of optimizing sales channels to maximize revenue potential. Targeted initiatives are required to strengthen underperforming channels and capitalize on emerging opportunities.
- **Product Portfolio Management:** Streamlining the product portfolio by discontinuing underperforming models and reallocating resources to high-potential offerings can enhance overall profitability and market competitiveness.

Strategic Recommendations:

- **Market Expansion Strategy:** Prioritize targeted market expansion efforts in regions with untapped potential, leveraging data-driven insights to tailor marketing campaigns and capture emerging opportunities.
- **Brand Revitalization Initiatives:** Implement strategic brand-building initiatives to enhance brand awareness and loyalty, particularly for non-flagship brands, to diversify revenue streams and strengthen market presence.
- **Product Portfolio Optimization:** Conduct a comprehensive review of the product portfolio to identify underperforming models and reallocate resources to high-potential offerings, ensuring alignment with organizational objectives.
- **Sales Channel Enhancement:** Optimize sales channels to maximize revenue potential, focusing on strengthening relationships with government entities, enhancing channel efficiency, and capitalizing on emerging trends in consumer behavior.

Conclusion: HMC's analysis underscores the importance of strategic initiatives to drive sustainable growth and profitability in the global automotive market. By leveraging data-driven insights and implementing targeted strategies to expand market reach, revitalize brands, optimize the product portfolio, and enhance sales channels, HMC can position itself for long-term success and competitiveness. With a commitment to innovation and strategic execution, HMC can navigate market complexities and emerge as a leader in the automotive industry.

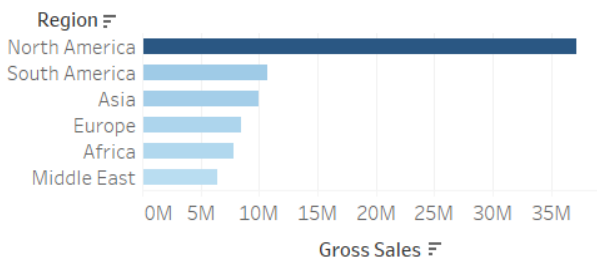


OVERALL PERFORMANCE ANALYSIS

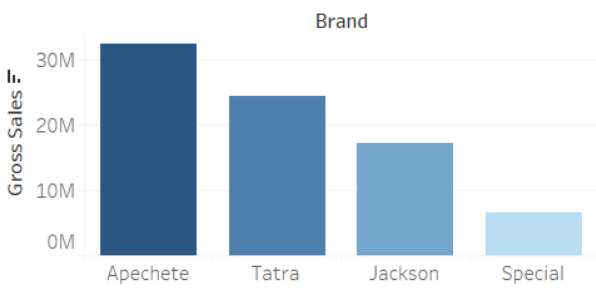
PERFORMANCE ANALYTICS

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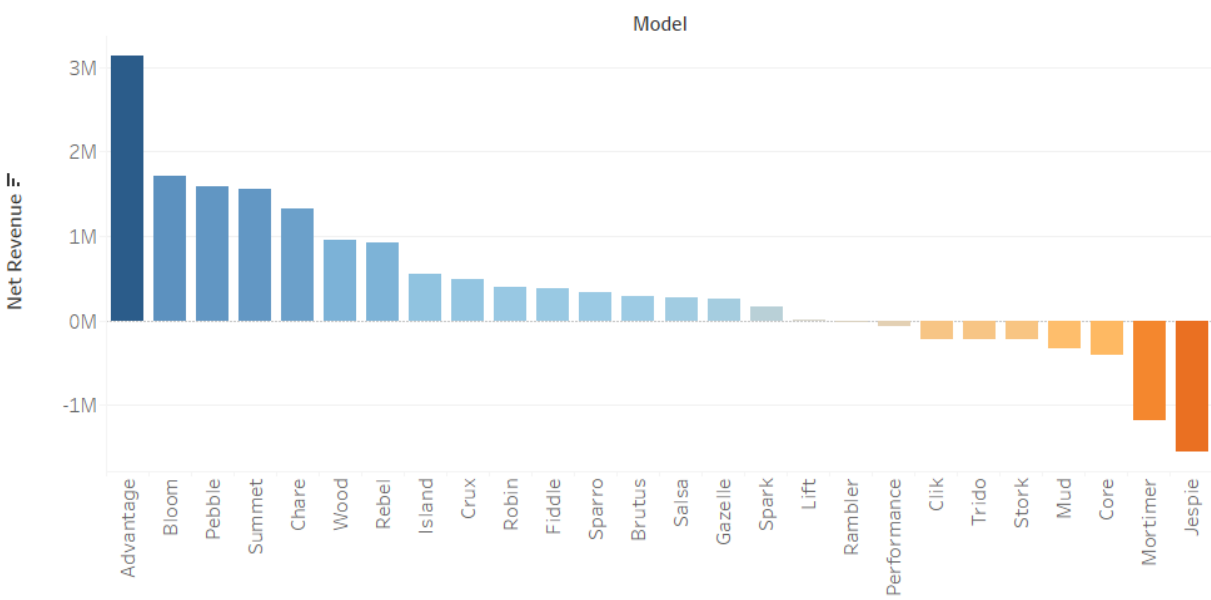
Gross Sales Per Region



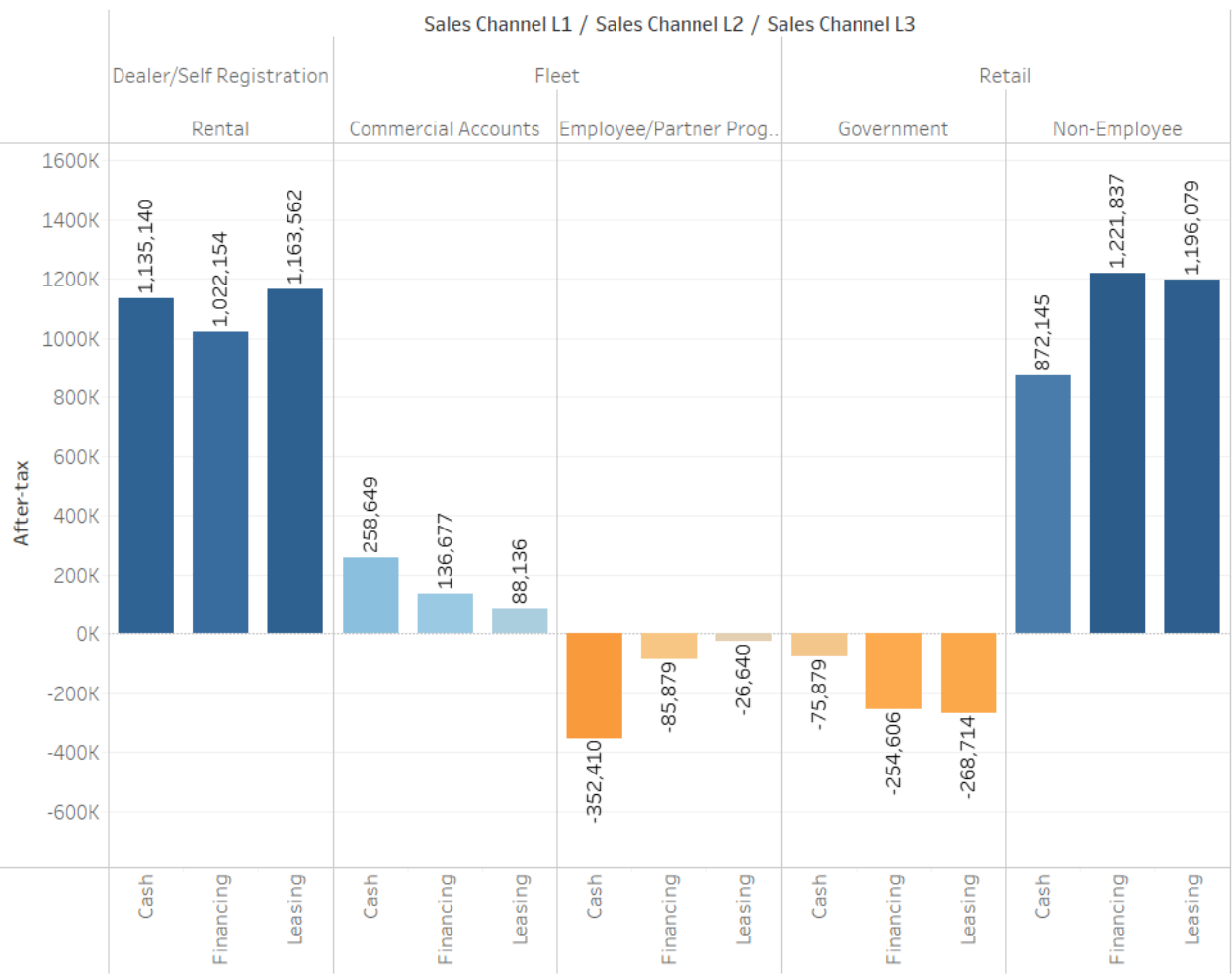
Gross Sales Per Car Brand



Profit Before Tax per Car Model



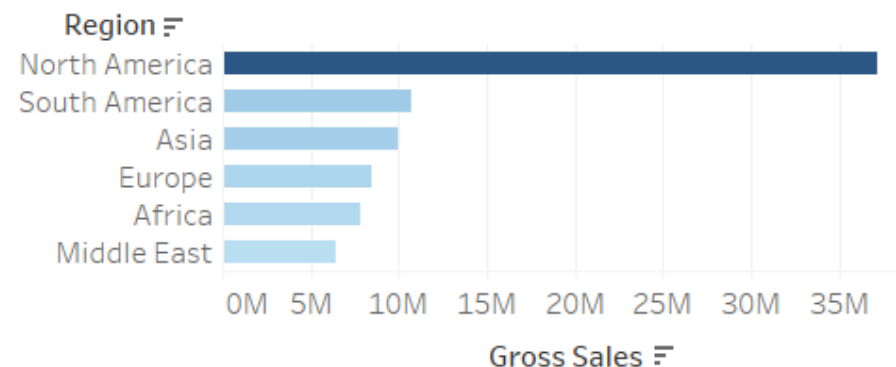
After tax Profit According to Sales Channel



GLOBAL PERFORMANCE

- Based on D&A's interactive dashboard, we can conclude that HMC's sales extend up to 6 different geographical regions.
- North America accounts for 46% of HMC's total Gross Sales, outlining its high impact on the American market.
- The North American market contributed an outstanding \$4.1 million dollars of profit before tax to HMC's operations.
- As per D&A's analysis, a discrepancy between Gross sales and Profit before tax was uncovered. South America has higher gross sales than Asia, however, Asia's profitability before tax surpasses that of South America's, outlining a higher Contribution margin for Asia.

Gross Sales Per Region



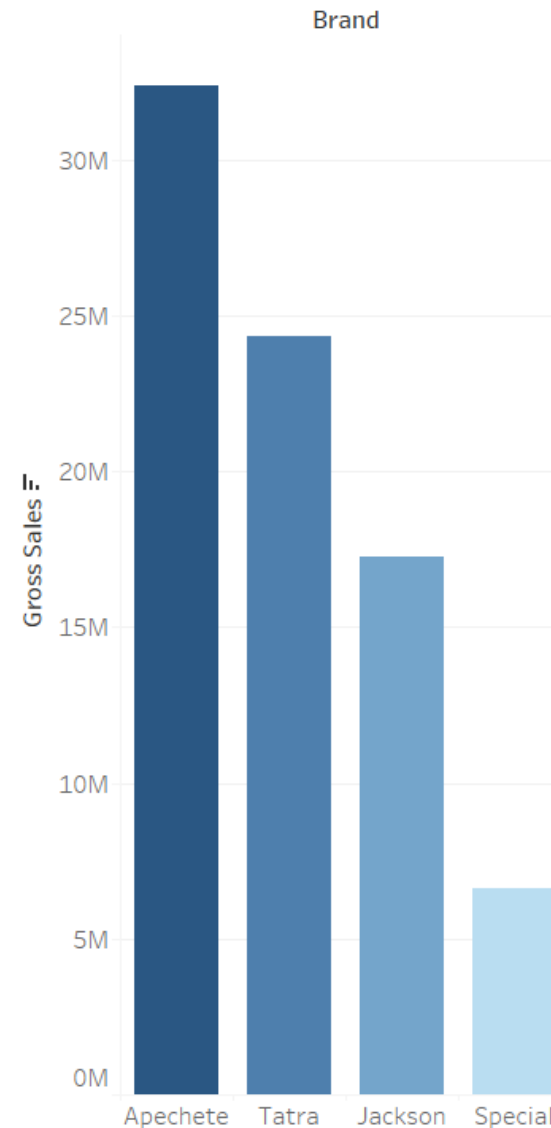
Profit Before Tax per Region

Region	Profit Before Tax (M)
North America	4,116,774
Asia	1,443,959
South America	1,425,630
Africa	1,157,386
Europe	1,007,222
Middle East	931,053

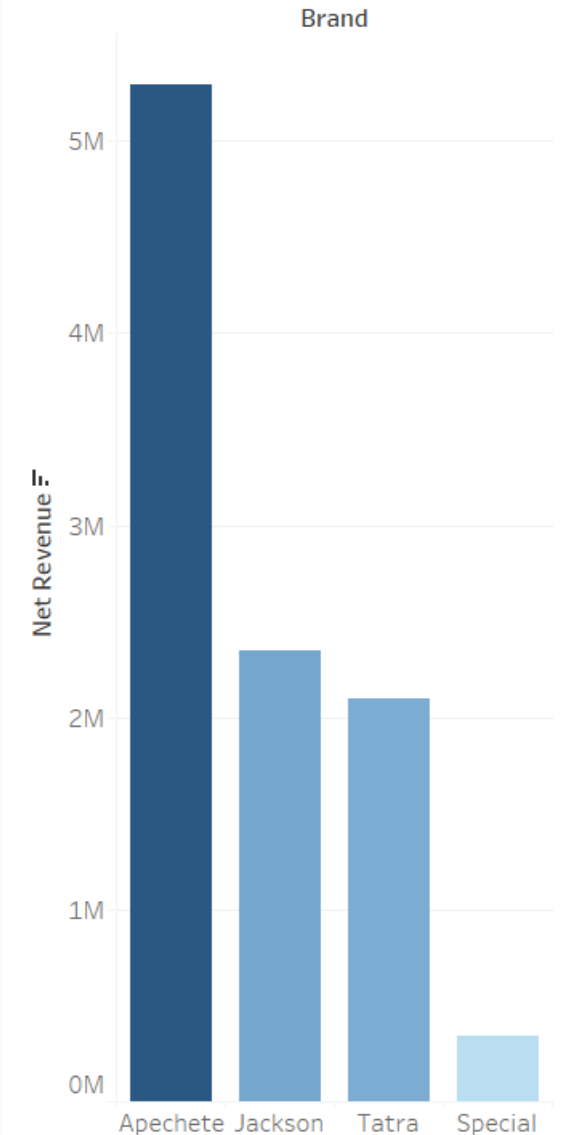
BRAND PERFORMANCE

- It is evident that Apachete is HMC's most recognized brand, contributing a total of \$32.4 million in gross sales and \$5.4 million in profit before tax.
- The second most profitable car brand before tax is Jackson, with a total profit before tax of \$2.3 million.
- Special lies as the least profitable and least selling car brand.

Gross Sales Per Car Brand

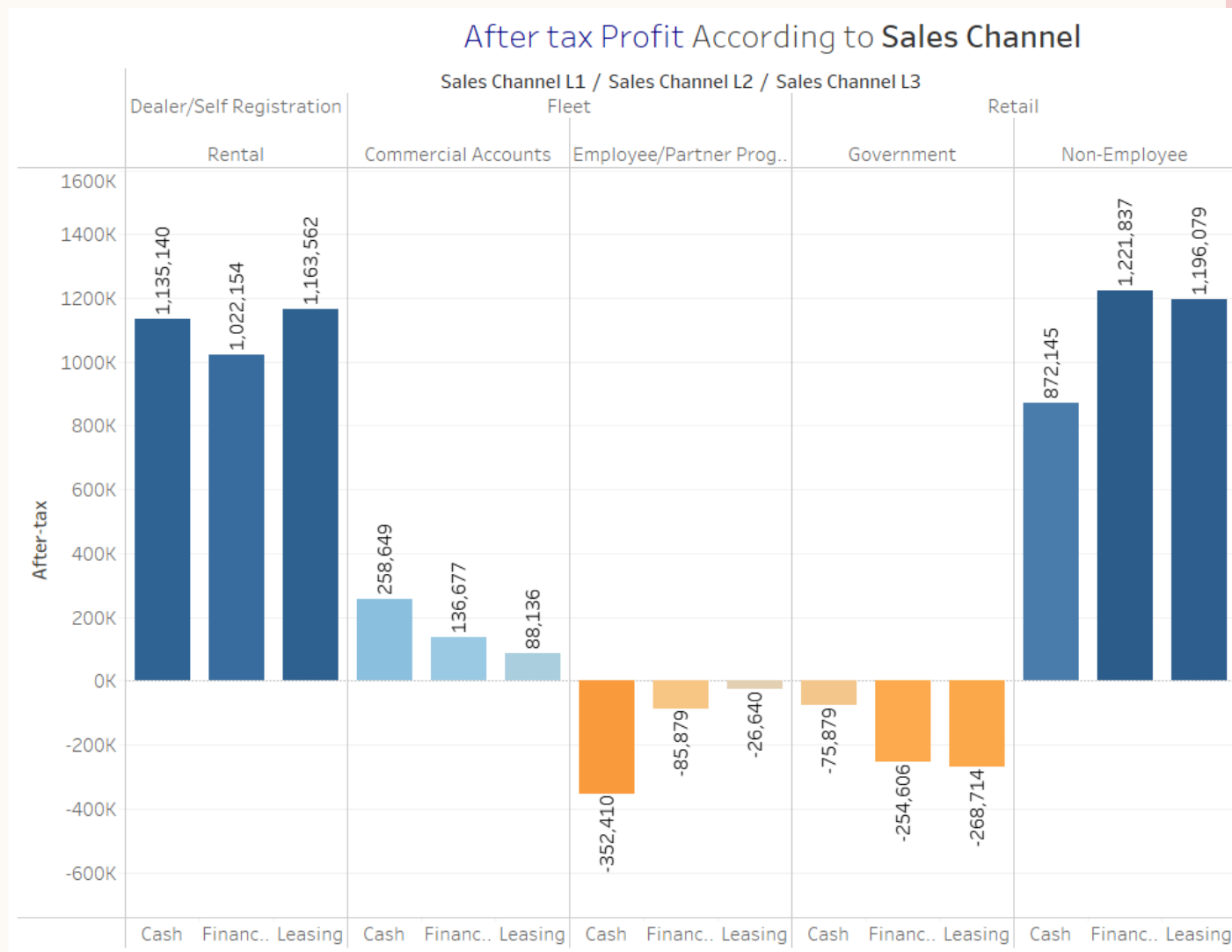


Profit Before Tax per Car Brand



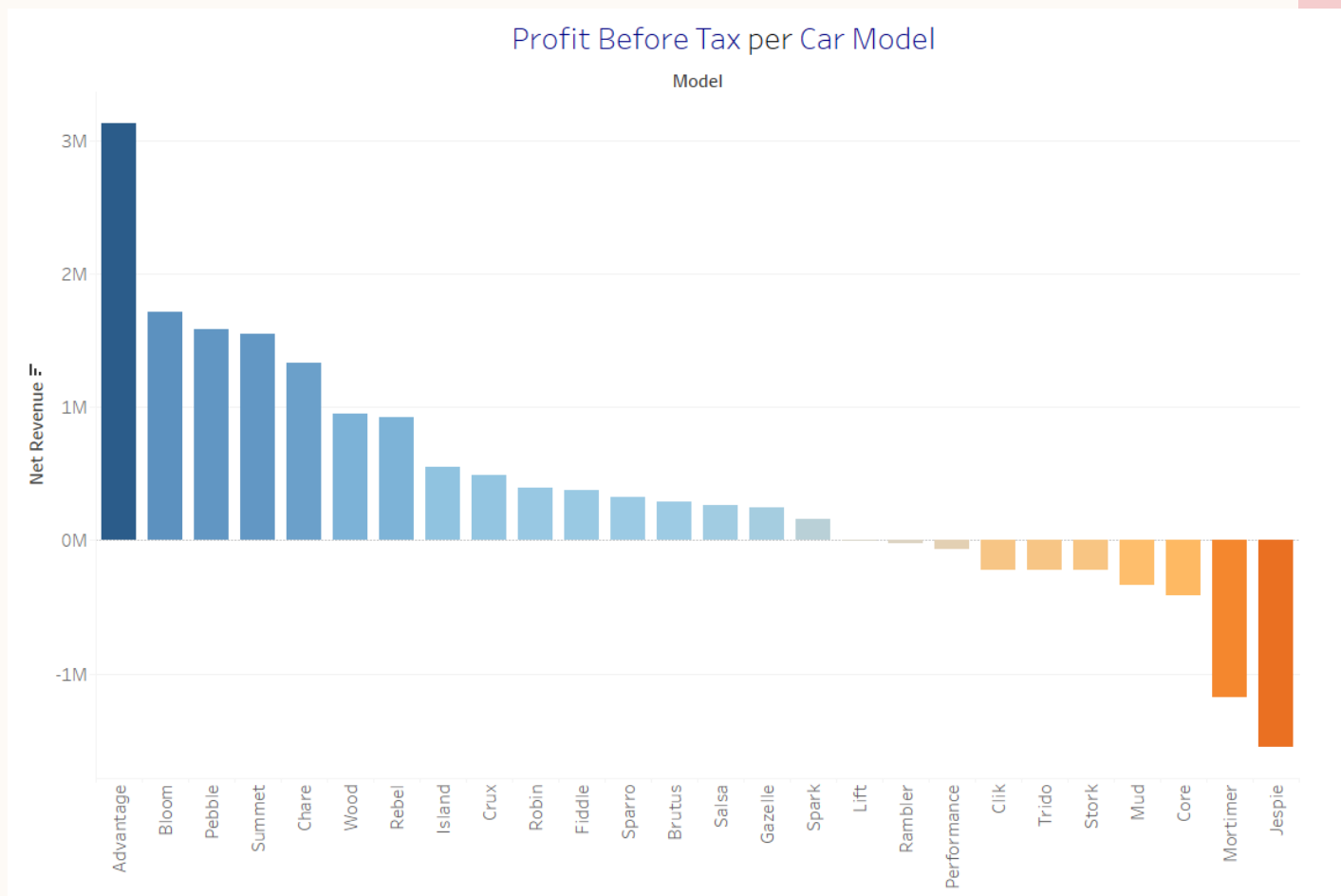
SALES CHANNEL PERFORMANCE

- Per our analysis, it is evident that Dealer/Self registration accounts for most of the sales channel's after-tax profit.
- 55% of after-tax profit came from Dealer/Self Registration
- 44.6% of after-tax profit came from Retail
- Just 0.4% after-tax profit came from Fleet.



MOST & LEAST PROFITABLE MODELS

- Categorization of profitability was measured by overall profit by model before tax.
- With an overall profit before tax of \$3.1 million, **Advantage** stands as the most profitable model in our production line, followed by Bloom and Pebble.
- Surprisingly, even though Jespie is one of our best-selling models, it is also our **least profitable model**.



FINANCIAL ANALYSIS

COST ANALYTICS

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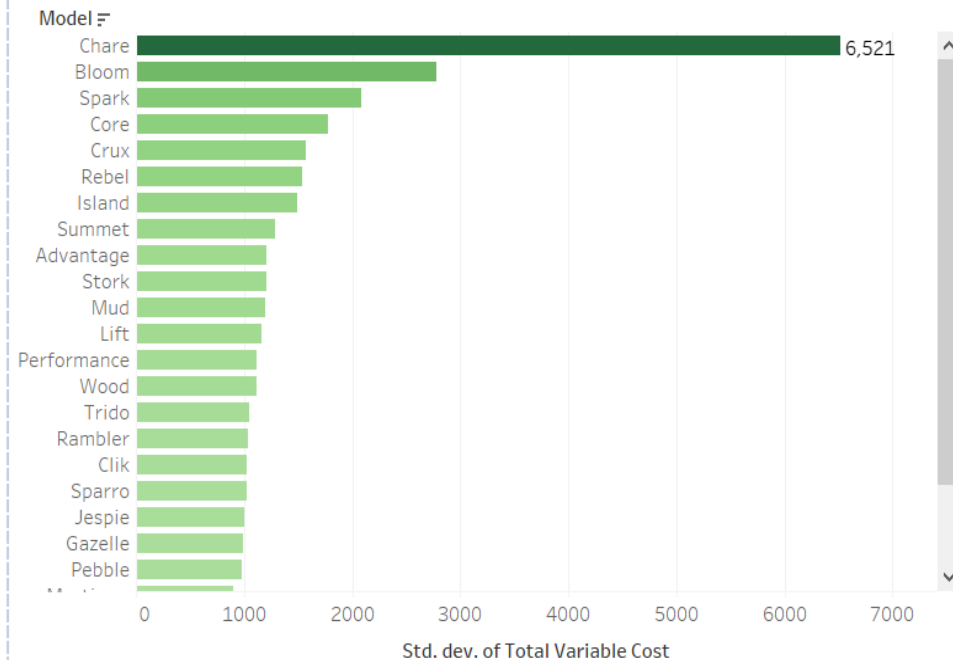
Sales Channels Average Contribution Margin

Sales Channel L1 / Sales Channel L2 / Sales Channel L3															
Dealer/Self Registration			Fleet									Retail			
Rental			Commercial Accounts			Employee/Partner Programs			Government			Non-Employee			
Cash	Financi..	Leasing	Cash	Financi..	Leasing	Cash	Financi..	Leasing	Cash	Financi..	Leasing	Cash	Financi..	Leasing	
14,341	14,647	14,199	9,702	9,233	7,643	4,404	5,476	5,837	5,736	4,246	4,574	14,283	15,118	1	

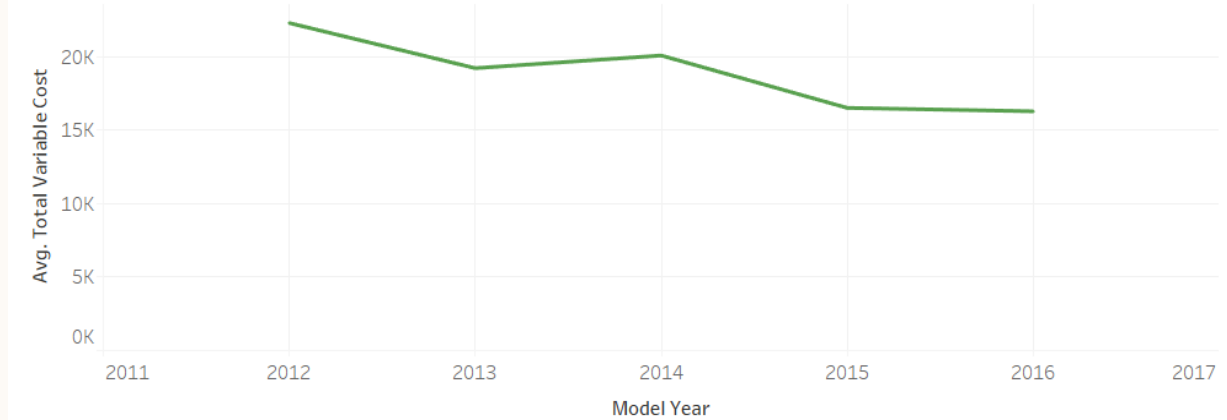
Average Contribution Margin Per Model

Model	
Chare	25,158
Summet	20,106
Rebel	18,781
Wood	18,170
Bloom	18,150
Pebble	16,463
Advantage	15,110
Crux	14,172
Sparro	13,807
Robin	12,018
Island	11,841
Fiddle	10,532
Spark	10,372
Gazelle	10,075
Brutus	8,850
Salsa	8,510
Trido	6,783
Stork	6,028

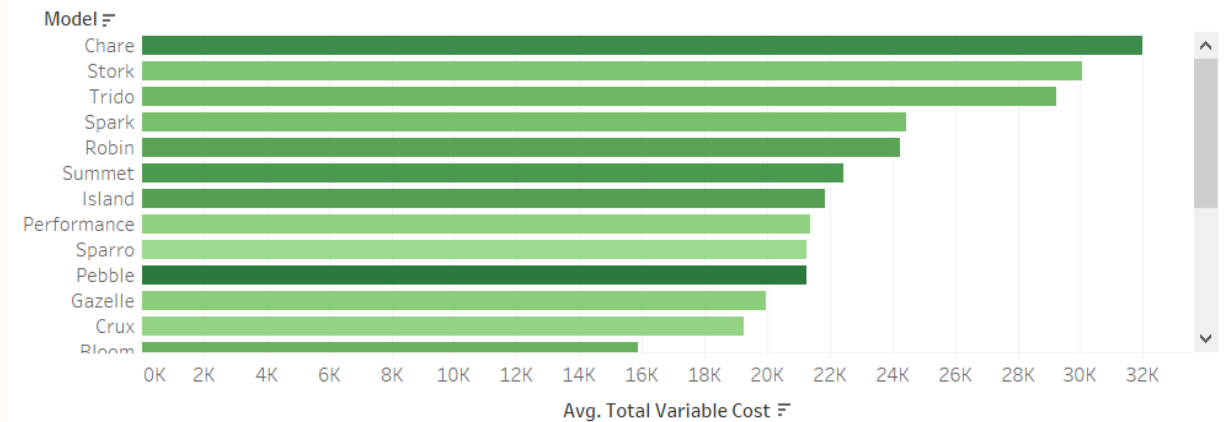
Variability in Variable Cost per Model



Total Average Variable Cost over time



Average Variable Cost per Model



Average Contribution Margin Per Model

Model	CM
Chare	25,158
Summet	20,106
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Island	11,841
Fiddle	10,532
Spark	10,372
Gazelle	10,075
Brutus	8,850
Salsa	8,510
Trido	6,783
Stork	6,028
Performance	5,644
Lift	4,494
Rambler	3,930
Clik	723
Mud	-147
Mortimer	-1,163
Jespie	-1,321
Core	-1,354

CURRENT CM PER MODEL

- Highest average contribution margin pertains to the Chare model with an average CM of \$25,158
- By having enough revenue to cover fixed and variable costs, Chare is on average the second most profitable model.
- Unable to cover variable and fixed costs, Jespie and Core lie as the models with the lowest contribution margin in our sales mix with -\$1321 and -\$1354 respectively.

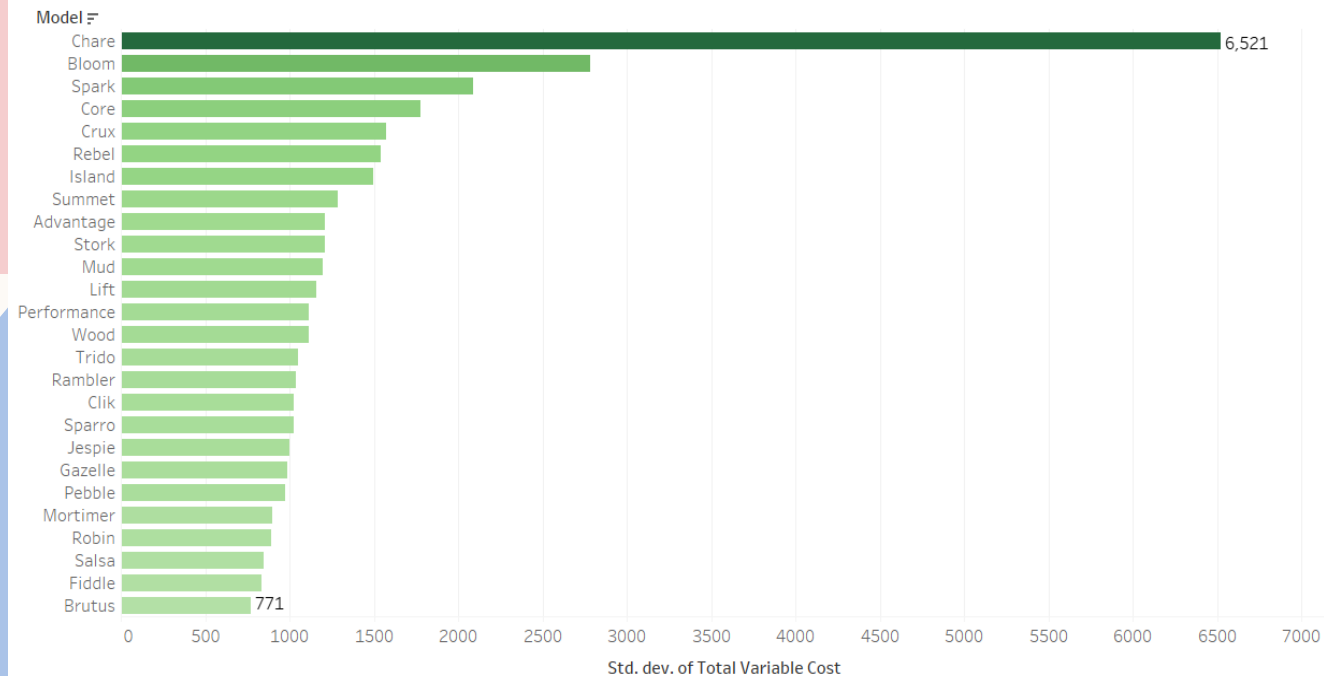
AVERAGE VARIABLE COST

Average of Total Variable Cost		Column Labels				
Model		2012	2013	2014	2015	2016
Chare				\$ 35,635.67	\$ 22,548.81	\$ 34,298.28
Stork					\$ 29,824.17	\$ 30,375.16
Trido				\$ 29,076.31	\$ 29,351.70	
Spark	\$	24,215.24	\$ 24,714.65			
Robin				\$ 24,138.60	\$ 24,332.24	
Summet	\$	22,166.98	\$ 22,720.85			
Island	\$	21,750.94	\$ 21,959.02			
Performance	\$	21,099.53		\$ 21,691.70		
Sparro					\$ 21,017.74	\$ 21,469.92
Pebble			\$ 21,009.02	\$ 21,508.78		
Gazelle				\$ 20,003.16	\$ 19,954.97	
Crux					\$ 19,062.81	\$ 19,460.28
Bloom				\$ 15,754.70	\$ 16,002.01	
Wood		\$ 15,406.17	\$ 15,732.60			
Brutus				\$ 15,378.04	\$ 15,606.83	
Mud					\$ 15,184.98	\$ 15,463.49
Fiddle					\$ 15,111.89	\$ 15,466.99
Clik					\$ 15,083.73	\$ 15,205.74
Salsa		\$ 14,613.78			\$ 14,903.08	
Lift					\$ 14,699.36	\$ 14,733.25
Core					\$ 14,574.77	\$ 14,579.09
Rebel					\$ 14,331.82	\$ 14,396.99
Jespie					\$ 13,883.72	\$ 14,113.31
Rambler		\$ 13,460.27	\$ 13,835.90			
Mortimer					\$ 13,412.82	\$ 13,547.35
Advantage					\$ 12,563.09	\$ 12,629.55
Grand Total	\$	22,274.03	\$19,205.32	\$20,065.88	\$16,503.27	\$16,272.57

- Total Average variable cost has decreased over the years.
- The company has effectively expanded their model production, allocating their variable cost per model in a more effective way.
- As one would expect, average variable cost per model increases as time passes, except for Gazelle from 2014 to 2015 and Chare from 2014 and 2015.
- As stated above this may have resulted due to the incorporation of new models in the sales mix.

VARIABILITY IN VARIABLELY COST

Variability in Variable Cost per Model



- It is always a good idea to inform stakeholders on which product has the largest variability within the variable cost category.
- With respect to HMC's product line, Chare is identified as the model with the highest variability in their variable cost.
- High variability results in lower predictive power, it is imperative to track Chare's variability in variable cost to ensure forecast predictions can be transformed into valuable insights.

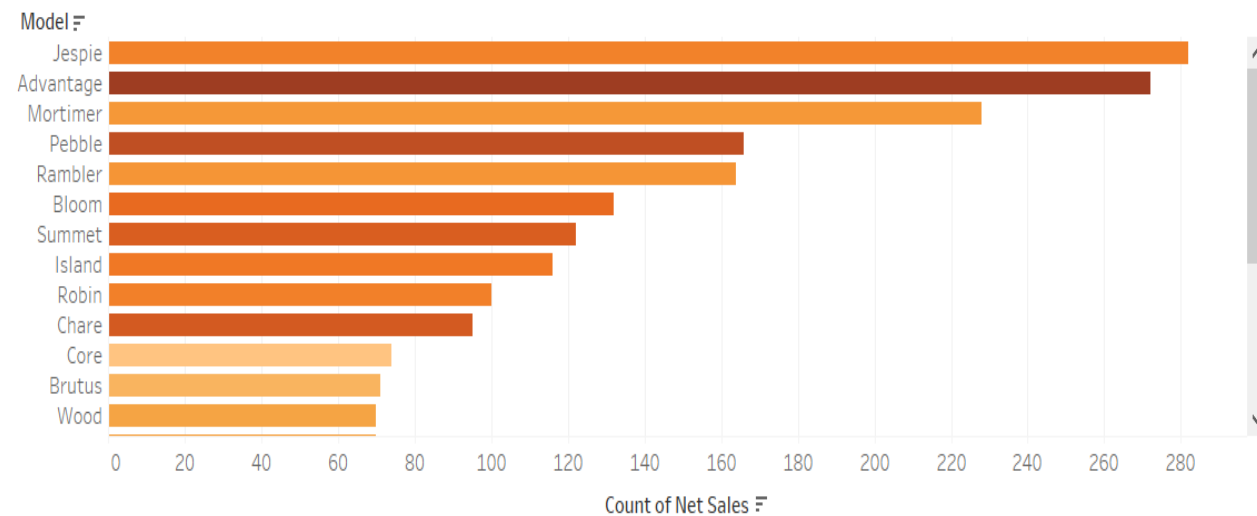
OPERATIONS ANALYSIS

PRODUCT ANALYTICS

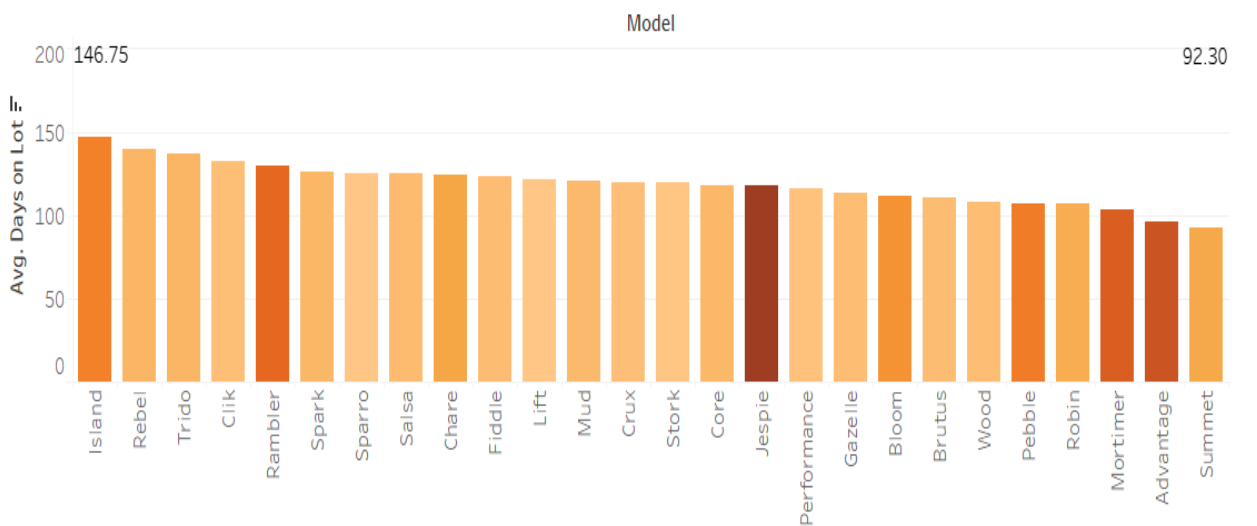
Top and Bottom Sellers by Model Options



Top and Bottom Selling Models by Net Sales



Average Number of Days in Lot



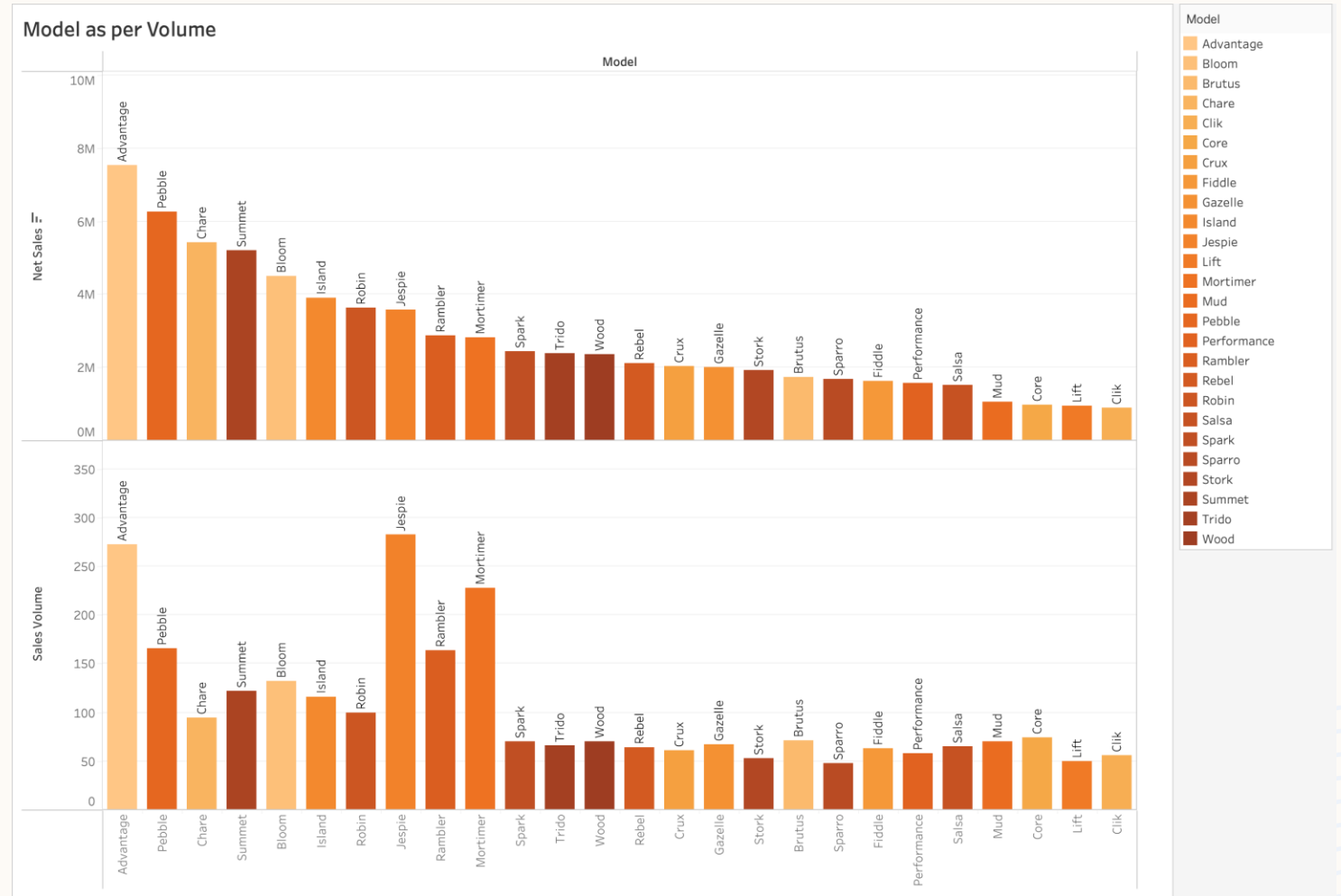
TOP AND BOTTOM SELLER BY MODEL OPTIONS

- **Luxury Segments Lead:** Full-Size Luxury and Mid-Size Luxury vehicles have the highest sales across all model options, consistently at \$22.66M and \$18.86M, respectively.
- **Mid-Tier Segments:** Sports Utility, Compact, and Minivan segments have moderate sales, ranging from \$3.32M to \$6.37M.
- **Lower Sales in Entry-Level and Small Vehicles:** Entry-Level Luxury and smaller segments (Subcompact, Micro) have the lowest sales, between \$1.25M and \$3.30M.
- **Consistent Option Popularity:** Features like Keyless Entry, Moon Roof, and Parking Assist have uniform popularity and sales within each segment.

TOP AND BOTTOM SELLER MODELS

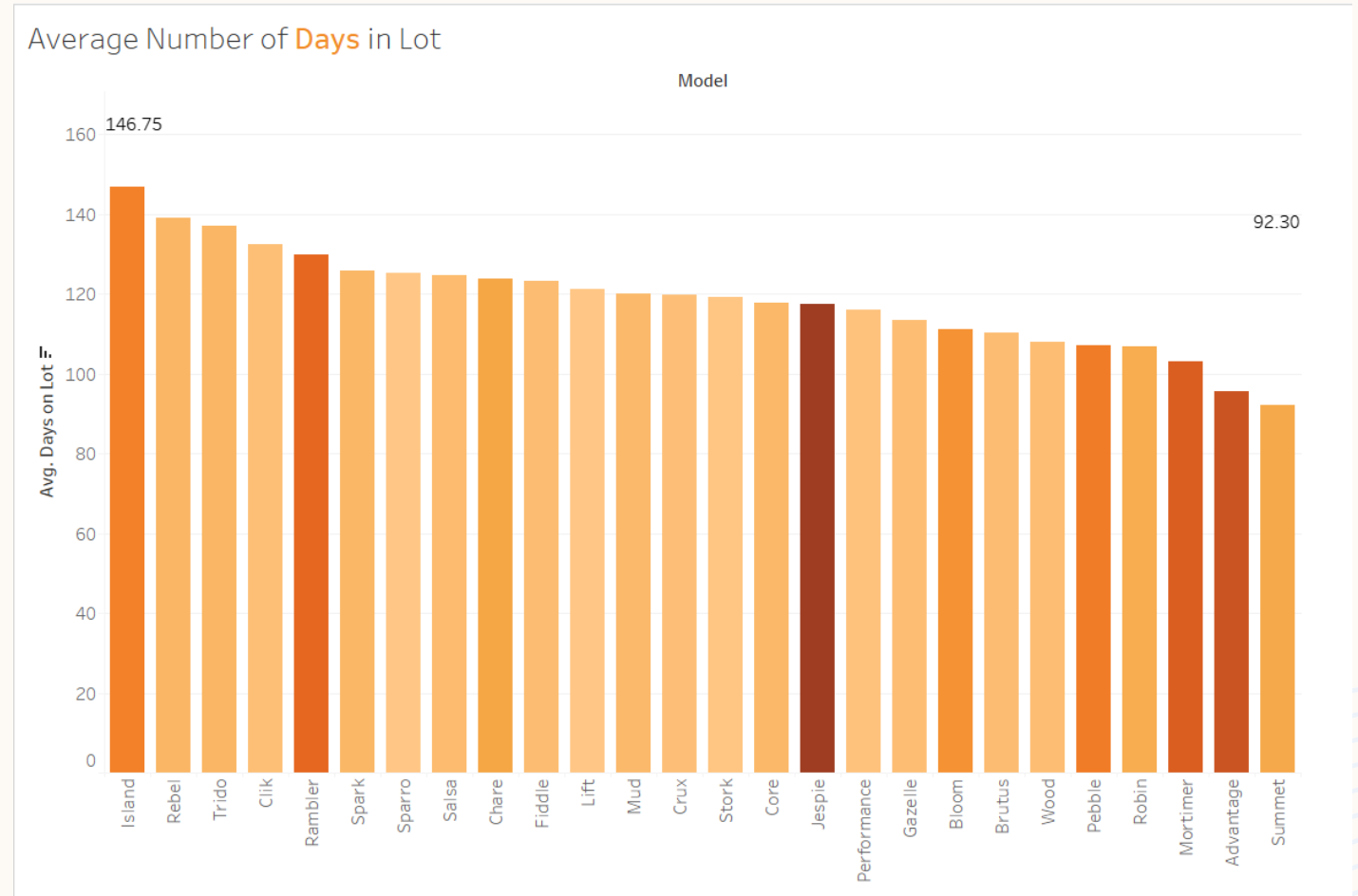
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- In terms of Net Sales **Advantage** has the highest figure yet with a cumulative sales of **\$7.536** Million.
- At the other side of the scale, **Clik** was the worst performer with **\$0.88** Million in net sales.
- With respect to sales volume, **Jespie** has the highest contribution with **282** units been sold.
- On the other hand, **Sparro** was unable to meet expectations with only **48** units been sold



INVENTORY BY TIME IN LOT

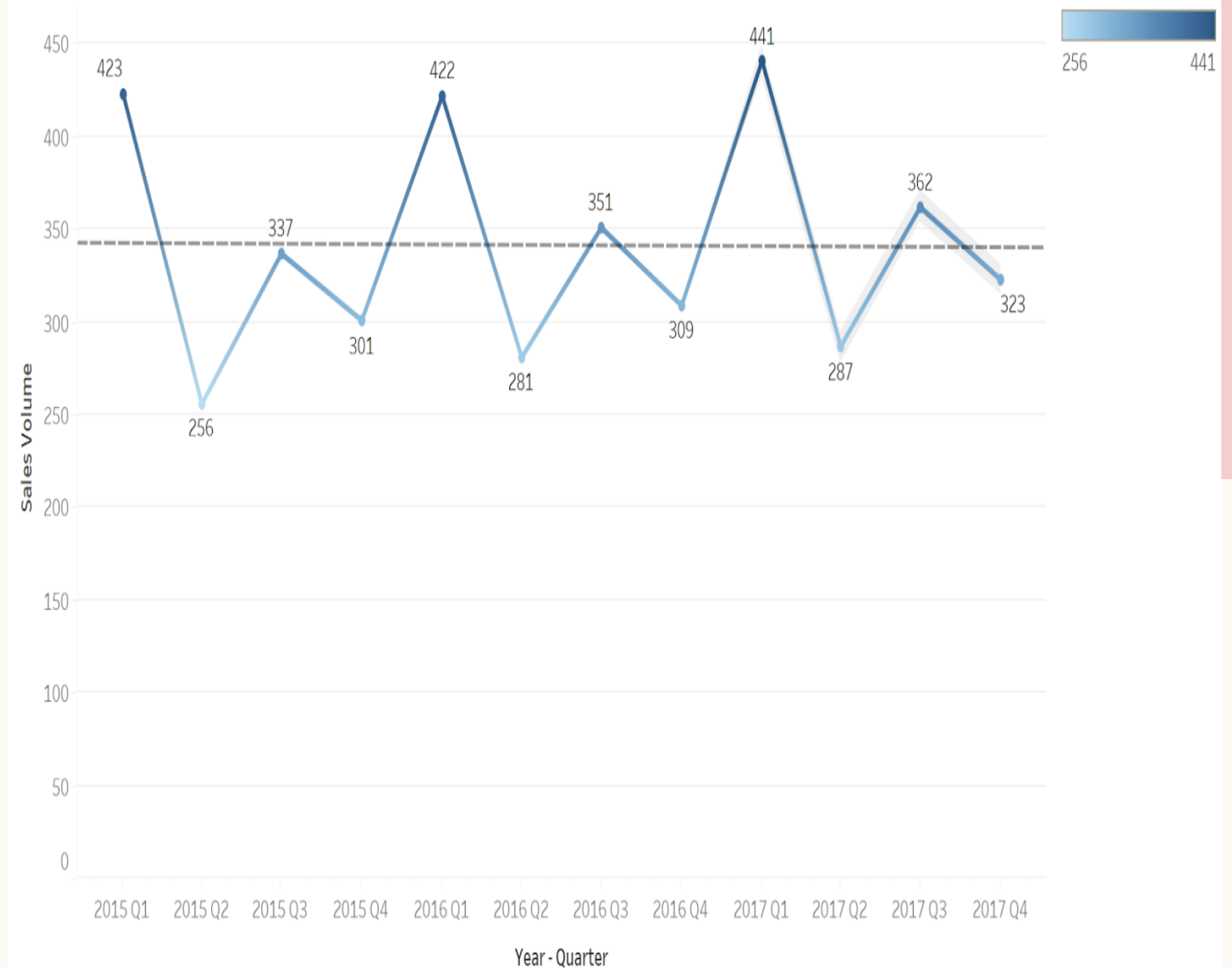
- Island spent most number days in lot with a total of **146.75** days. Meaning, this specific model is more prone to discounts, given the fact that dealers would normally want to sell their cars with an average of 60 days on their lot, incentivizing them to lower the price if expectations are not met.
- Summet spent the least number of days in the lot with just **92.30** days in total. Possibly outlining a relatively high demand for this specific model.



FORECAST

- **Seasonal Variations:** Despite fluctuations, no distinct seasonal pattern is evident, suggesting diverse influences on sales volume.
- **Overall Growth:** A clear upward trend in sales volume from 2015 to 2017 indicates positive sales performance and effective strategies.
- **Forecasted Growth:** The trendline projection suggests an expectation of continued growth in sales volume, though forecasts are subject to uncertainties.
- **Factors Driving Fluctuations:** Analysis should focus on seasonal demand patterns, consumer preferences, competition, and market conditions.
- **Drivers of Growth:** Successful product launches, market expansion, effective marketing, and improved customer satisfaction contribute to sales growth.
- **Risk Assessment:** Potential threats include economic downturns, regulatory changes, supply chain disruptions, and intensified competition.

Forecasting Sales Volume



The trend of sum of Sales Volume (actual & forecast) for Sold Date Quarter. Color shows sum of Sales Volume (actual & forecast). The marks are labeled by sum of Sales Volume (actual & forecast).

- Seasonal Trend:**

- Higher contribution margins in Q3 & Q4, indicating seasonal variations.

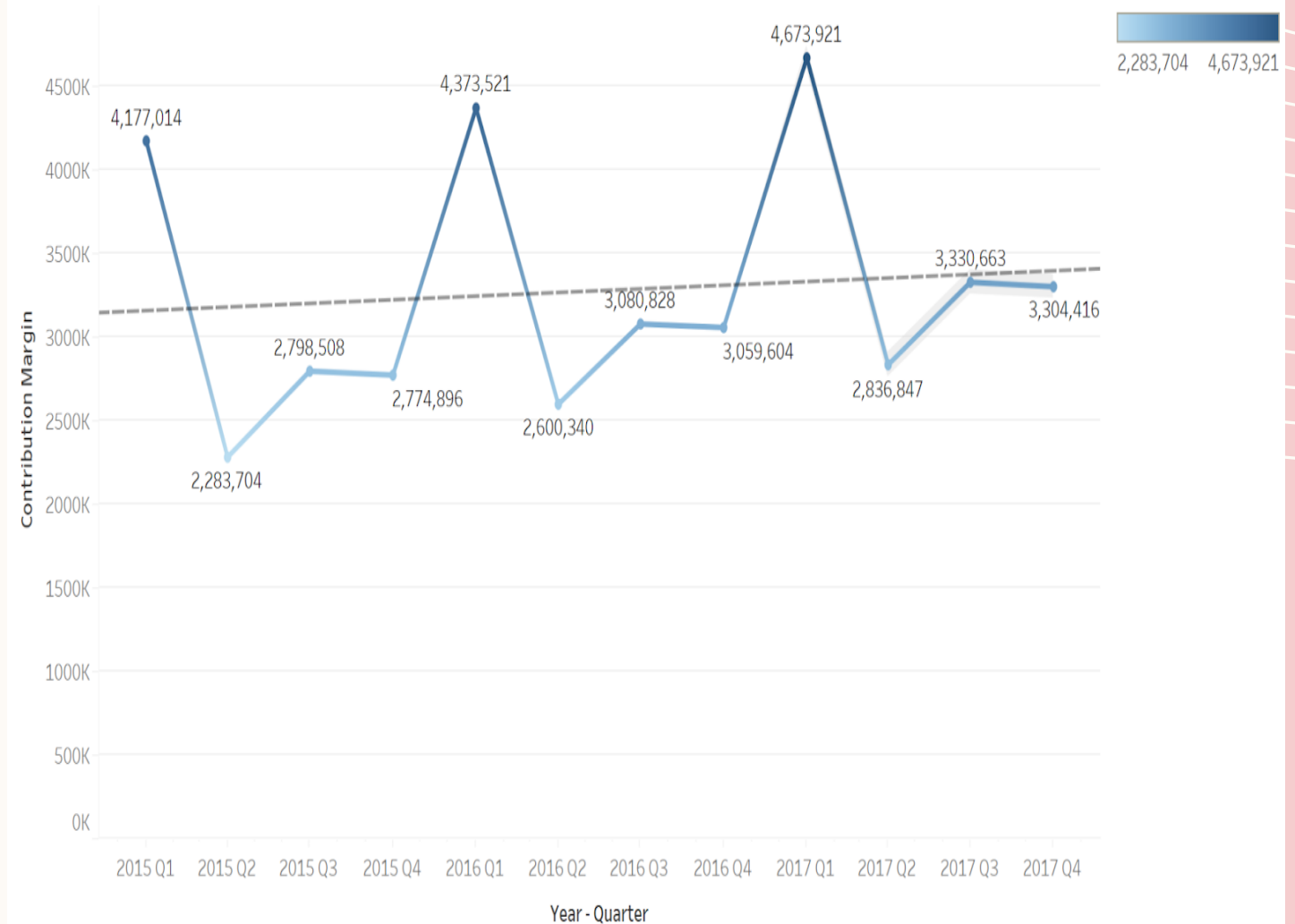
- Upward Trajectory:**

- Consistent improvement in contribution margin over four years, reflecting enhanced efficiency in cost management.

- Forecasted Growth:**

- The trendline predicts continued positive growth in contribution margin for the forecasted quarters. However, forecast uncertainties necessitate caution in interpreting future outcomes.

Forecasting Contribution Margin



The trend of sum of Contribution Margin (actual & forecast) for Sold Date Quarter. Color shows sum of Contribution Margin (actual & forecast). The marks are labeled by sum of Contribution Margin (actual & forecast).

RECOMMENDATIONS

- **Targeted Market Expansion**
 - **Actionable Insights:** Prioritize market penetration efforts in underperforming regions like Jordan, Brazil, and Colombia.
 - **Data-Driven Approach:** Tailor marketing campaigns to local preferences and consumer behavior.
 - **Financial Implications:** Increased revenue streams can offset initial investments in market research and marketing.
 - **Non-Financial Implications:** Ensure cultural adaptation and regulatory compliance for successful market entry.
- **Brand Revitalization**
 - **Actionable Insights:** Elevate the prominence of the Apachete brand in regions with lower sales.
 - **Data-Driven Approach:** Develop targeted brand-building initiatives to enhance awareness and loyalty.
 - **Financial Implications:** Higher sales volumes and improved profit margins over time can offset initial brand-building investments.
 - **Non-Financial Implications:** Ensure cross-functional collaboration and alignment for effective brand revitalization.
- **Product Portfolio Optimization**
 - **Actionable Insights:** Discontinue or reposition underperforming models like Clik and Lift.
 - **Data-Driven Approach:** Use sales volume, net revenue, and contribution margin data to identify low profitability models.
 - **Financial Implications:** Streamlining the product portfolio can lead to cost savings and improved profitability.
 - **Non-Financial Implications:** Manage potential impacts on employee morale and organizational culture through effective change management.
- **Sales Channel Enhancement**
 - **Actionable Insights:** Optimize sales channels like Fleet to maximize revenue potential.
 - **Data-Driven Approach:** Analyze sales channel performance metrics and strengthen relationships with government entities.
 - **Financial Implications:** Enhanced sales channel efficiency can contribute to overall revenue growth and profitability.
 - **Non-Financial Implications:** Manage compliance requirements and contractual obligations with government clients through effective stakeholder management.

Implementing these strategic recommendations can help HMC capitalize on growth opportunities, improve operational efficiency, and enhance competitiveness in the global automotive market.



THANK YOU