



2003-2005

Sales Data Analysis

Jane Shan



1 BACKGROUND



2 TERRITORY ANALYSIS



3 SALES PREDICTION



4 POTENTIAL TERRITORY



CONTENT



01

Background

- To provide insights based on the dataset to the senior management group before their annual strategy meeting.
 - Specifically, 2003 Q1 - 2005 Q2 YOY sales performance in different product line of all territory was examined to find the best potential product
 - Findings of the analysis is used to aid the performance prediction in 2006.
 - Based on the analysis above to find the best potential territory
-

DEFINITION



MSRP

- MSRP: Manufacturer's suggested retail price



TERRITORY

- NA: North America
- EMEA: Europe, the Middle East and Africa
- APAC: Asia Pacific (



DISCOUNT

- Discount = (Sale Price – MSRP) * Quantity Ordered



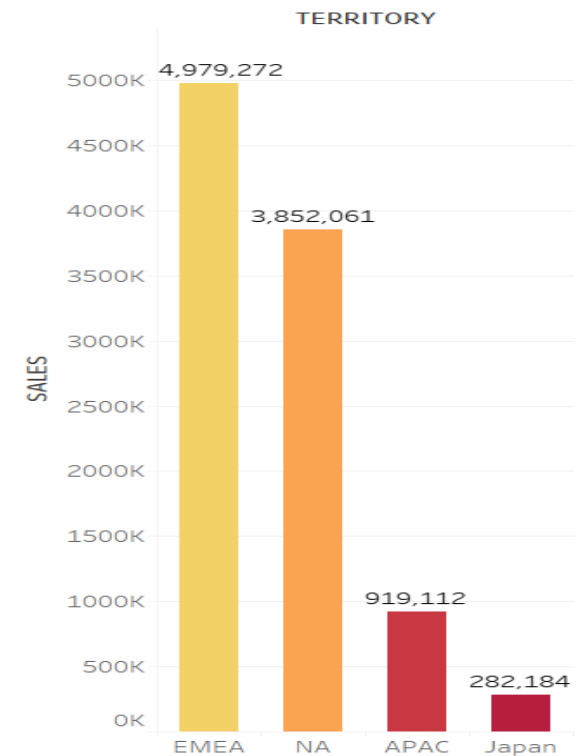
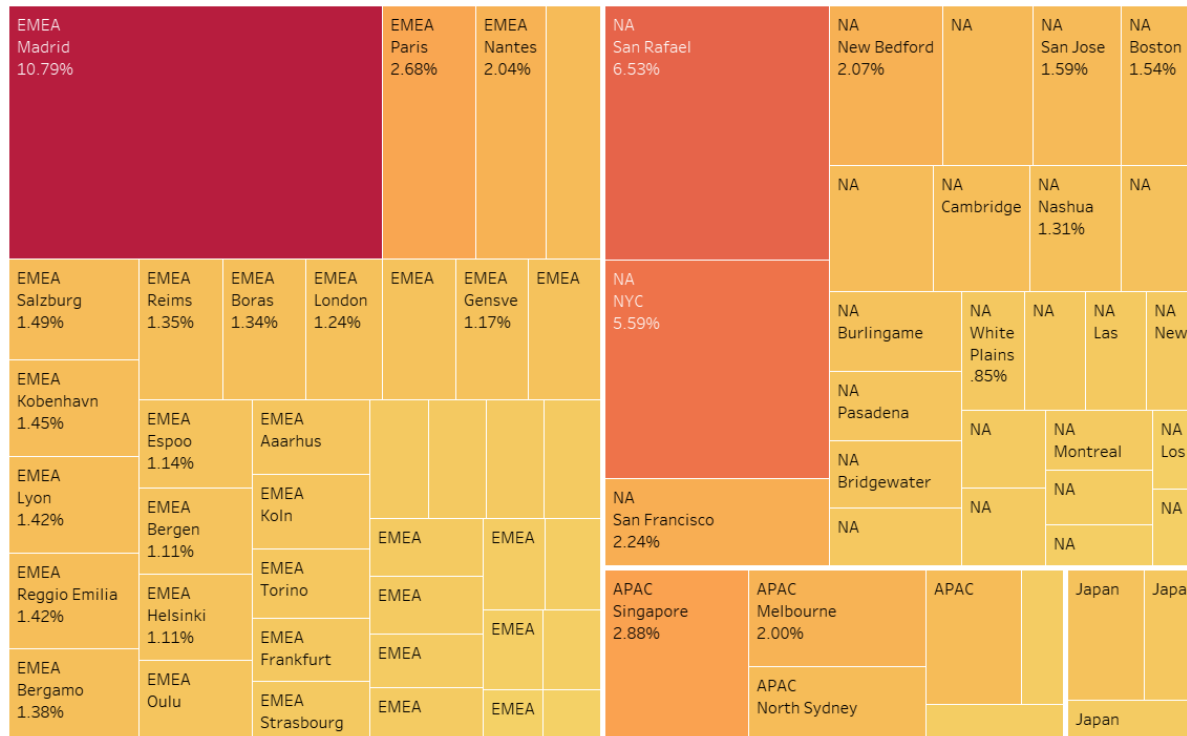
02

TERRITORY ANALYSIS

- Product analysis
 - Sales vs Discount
 - Best potential product
-

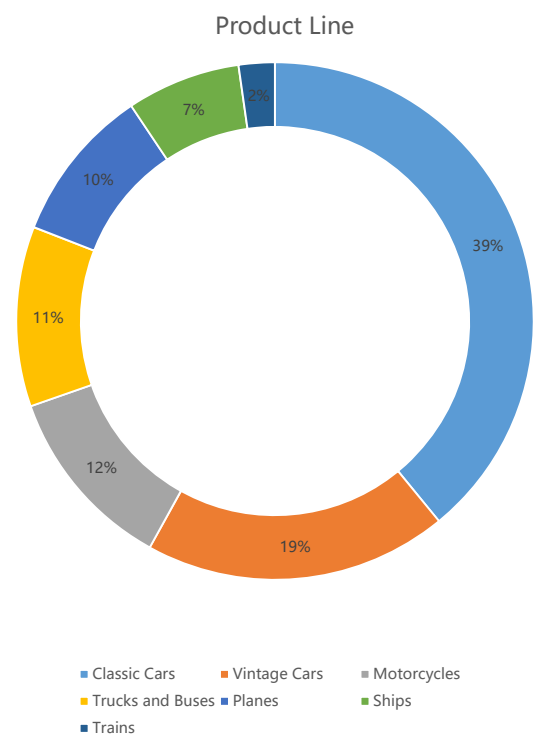
Sales Map Infographic

2003 Q1 - 2005 Q2 YOY sales performance in different product line of all territory was examined to find the best potential product

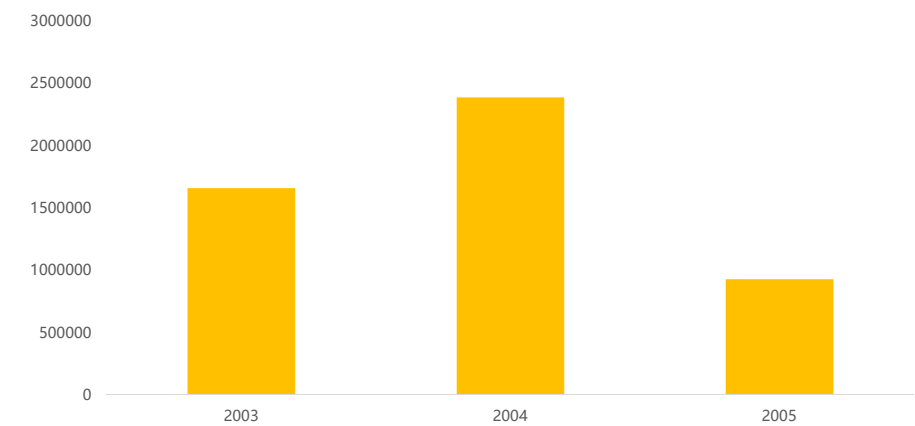


TERRITORY-EMEA

Overview



- The EMEA territory total sale for 2004 was 44% higher than 2003. And the 2004 quantity number is 43% higher than 2003.
- Main Client : Euro shopping channel
- Main City: Madrid



TERRITORY-EMEA

Product Analysis

	Product	Sales Growth/Decrease	Order Growth/Decrease
0	Classic Cars	0.462786	0.527852
1	Motorcycles	0.480765	0.561693
2	Planes	0.504655	0.482473
3	Ships	0.084464	0.089431
4	Trains	2.079846	1.544271
5	Trucks and Buses	-0.200922	-0.320655
6	Vintage Cars	0.926880	0.785646

EMEA territory 2003- 2004 Product sales data

Product line:

- Trucks and Buses: sale for 2004 was 20% lower than 2003. And the 2004 quantity number is 32% lower than 2003.
- Trains: sale for 2004 was 207% higher than 2003. And the 2004 quantity number is 154% higher than 2003.
- Overall, all product lines have grown, except for Trucks and Buses. The sales of Trucks and Buses decreased 20%, it is necessary to pay attention to marketing strategies in the next year, such as discount to enhance market competitiveness.

YEAR_ID

2003
2004

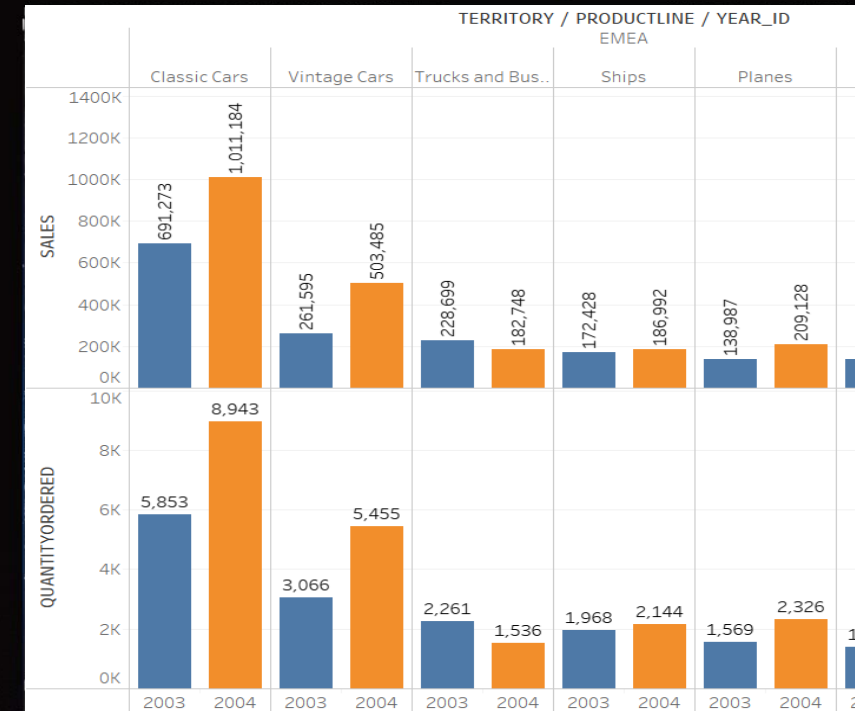


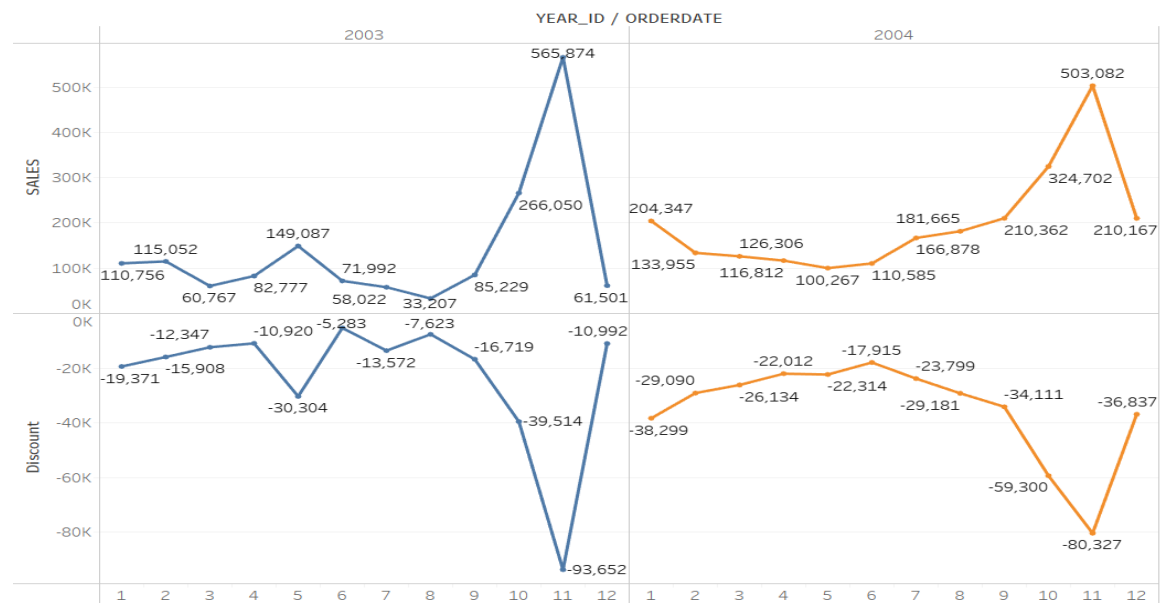


PHOTO FROM PIXABAY

TERRITORY-EMEA

Sales vs Discount

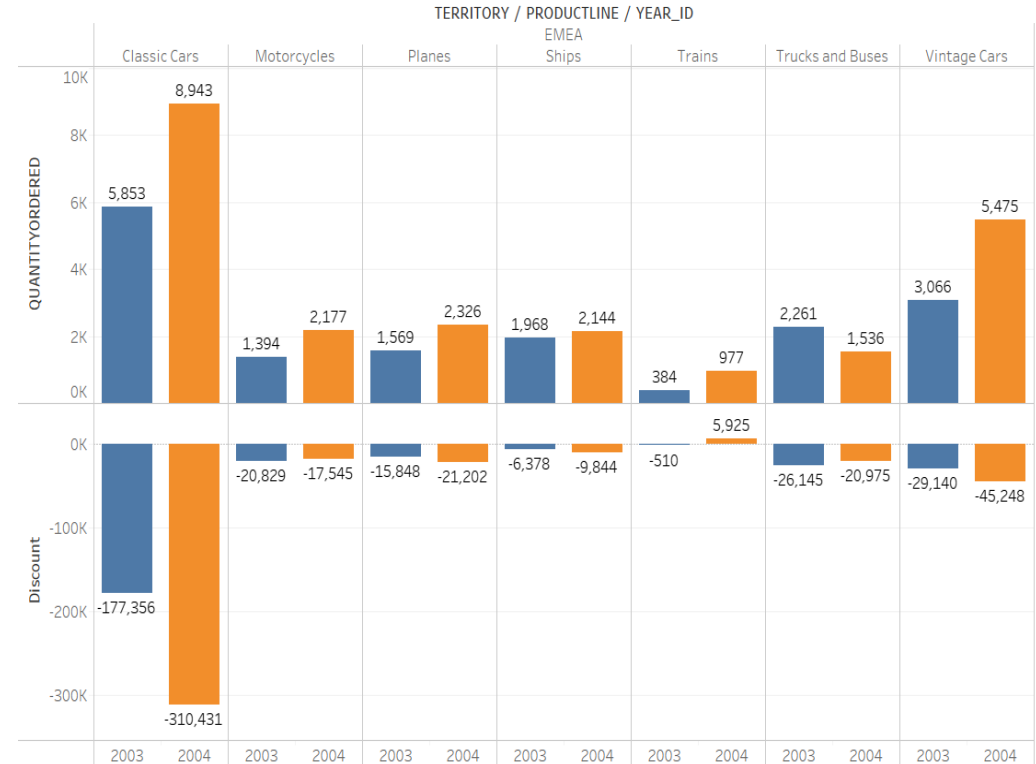
Look at the trend of Sales vs Discount in EMMA territory from 2003 to 2004. It is clearly that sales are highly positive related with discount. Sales peaks in 2003 May and November and sales peak in 2004 November are the best proof.



TERRITORY-EMMA

Sale vs Discount

- Meanwhile, products 'order number also positive relative with discount but not as obvious as NA territory.
- Both Classic Cars and Ships' discount growth greater than sales growth. Classic Cars increase 75% discount, but order number only increase for 52%. Ships increase 54% discount, but order number only increase for 8%.
- Both Planes and Vintage' growth rate greater than discount rate. Compared with Planes which discount has increased 30%, orders have increased 48%, Vintage Cars have relatively large growth potential. As discount increases for 55%, it's order number can increase to 78%.
- It is clear that in EMEA territory Vintage Cars have the best potential growth space.



SUMMARY

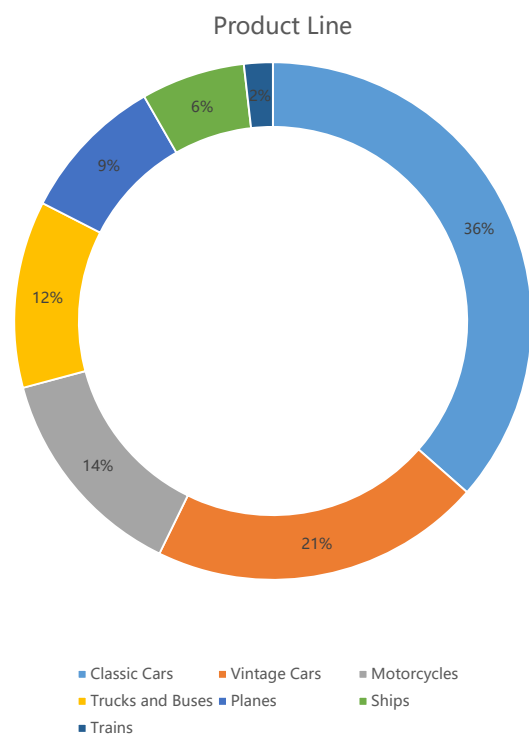
- The EMEA territory total sale for 2004 was 44% higher than 2003. And the 2004 quantity number is 43% higher than 2003. All product lines have grown, except for Trucks and Buses. The sales of Trucks and Buses decreased 20%, it is necessary to pay attention to marketing strategies in the next year, such as discount to enhance market competitiveness.
- Discount is the key variable for maximum revenue.
- In EMMA territory Vintage Cars have the best potential growth space.



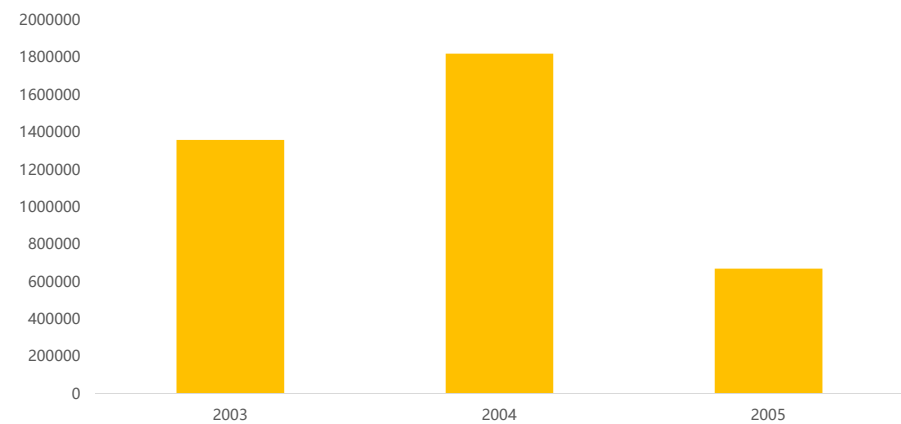
Business is the human activity related to material things. It is necessary for civilization.

TERRITORY-NA

Overview



- The NA territory total sale for 2004 was 34% higher than 2003. And the 2004 quantity number is 39% higher than 2003.
- Main Client : Mini Gifts distributors Ltd
- Main City: San Rafael



TERRITORY-NA

Product Analysis

NA territory 2003- 2004 Product sales data

Product line:

- Classic Cars: sale for 2004 was 1% lower than 2003. And the 2004 quantity number is 5.6% higher than 2003.
- Trains: sale for 2004 was 10% lower than 2003. And the 2004 quantity number is 17% lower than 2003.
- Overall, all product lines have grown, except for classic cars and trains. Although the sales of classic car have dropped, it has only dropped by 1%, sales have increased by 6%. So that it is feasible to reduce the unit price in exchange for more sales and thus increase market share. The sales of train decreased more, it has 10%. For train, it is necessary to pay attention to marketing strategies in the next year, such as discount to enhance market competitiveness.

YEAR_ID

2003
2004

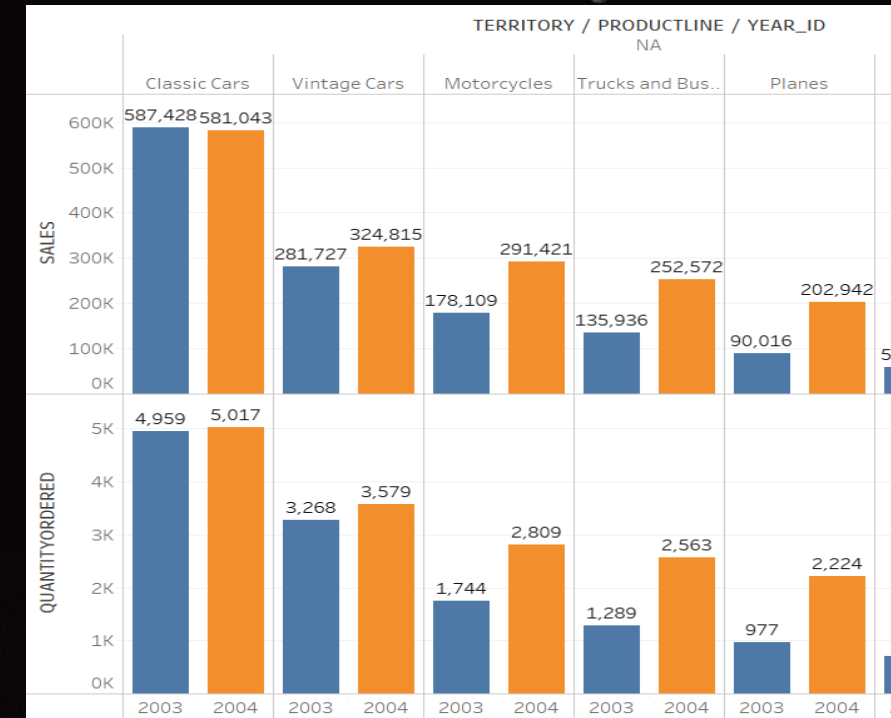


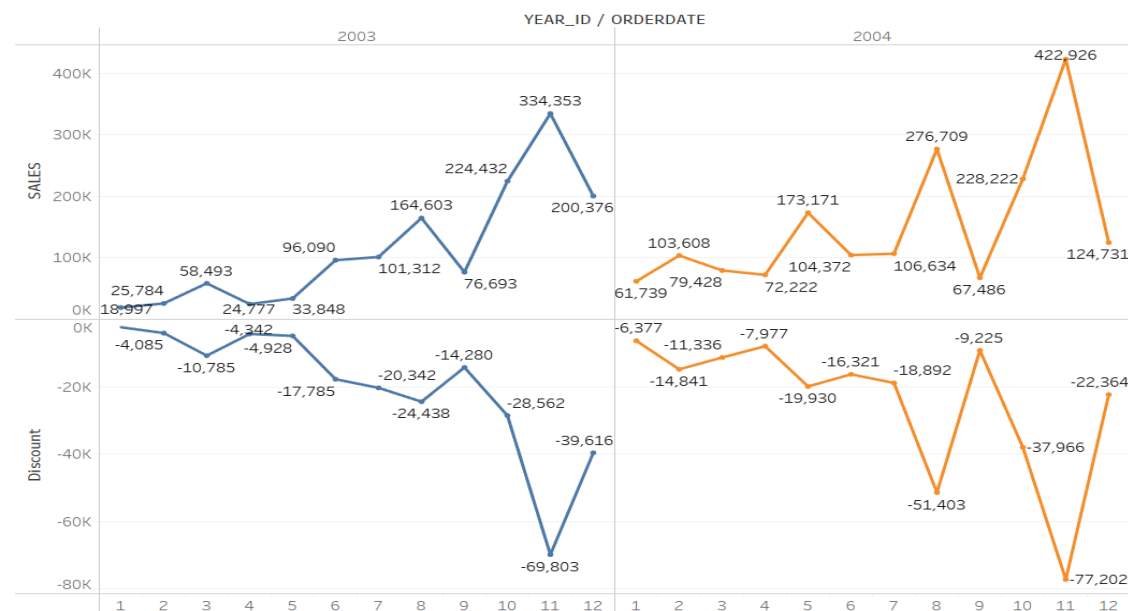


PHOTO FROM PIXABAY

TERRITORY-NA

Sales vs Discount

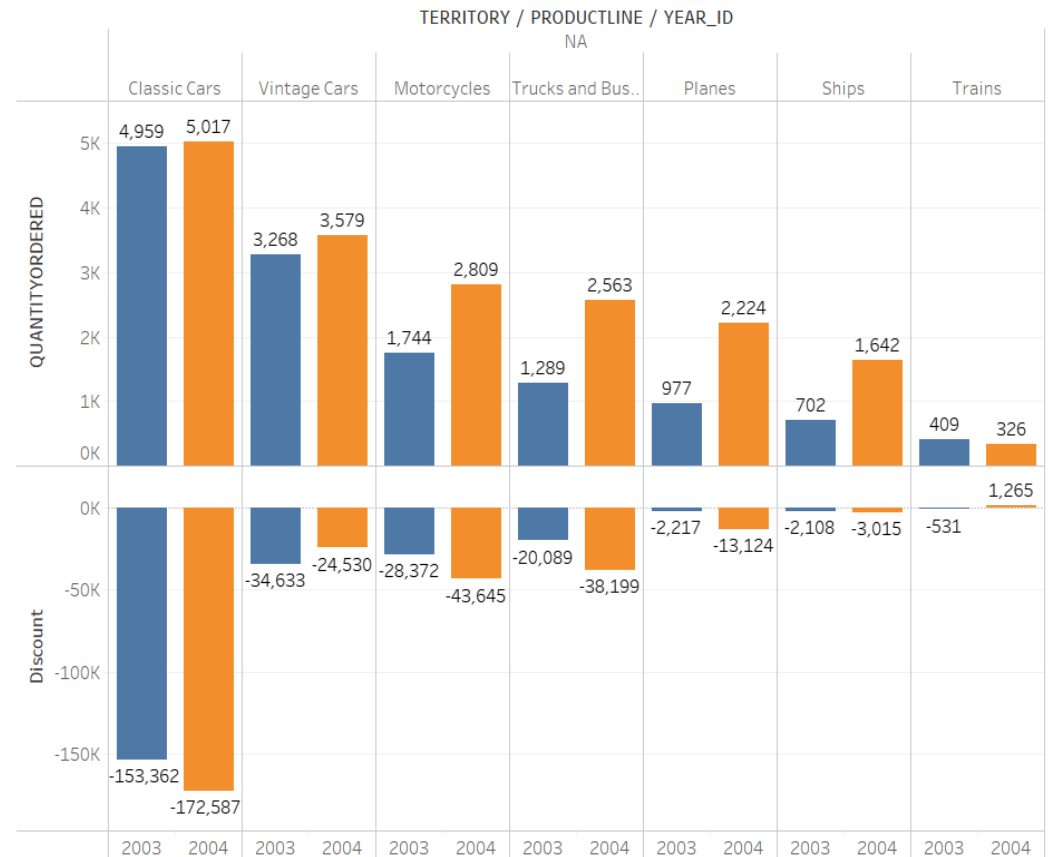
Look at the trend of Sales vs Discount in NA territory from 2003 to 2004. It is clearly that sales are highly positive related with discount: Two sales peaks (November and August) in 2003 and 2004 indicated that high sales always accompanied with high discounts.



TERRITORY-NA

Sale vs Discount

- Meanwhile, all products 'order number also positive relative with discount.
- Classic Cars increase 10% discount, but order number only increase for 1%. Motorcycles increase 54% discount, but order number only increase for 61%.
- Overall, indicates that higher order number, the less room for improvement. Order number increasement of main products is limited and has tend to be stable accompanied with increased discount. While, ships have relatively large growth potential. As discount increases for 49%, it' s order number can increase to 134%.
- It is clear that in NA territory ship has the best potential growth space.



SUMMARY

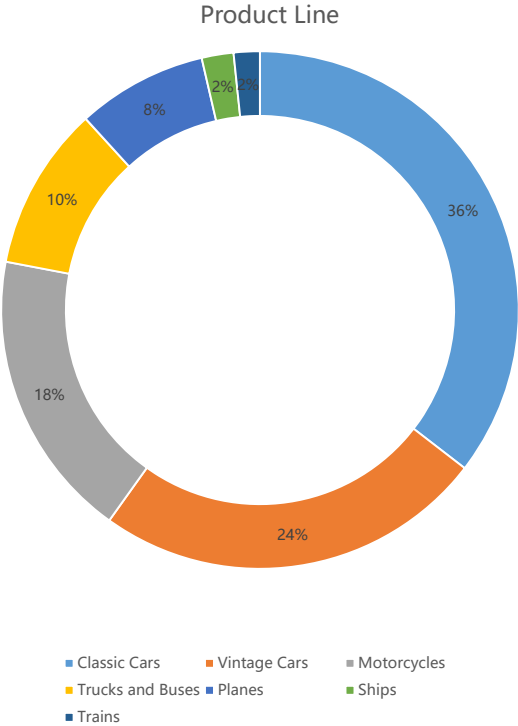
- The NA territory total sale for 2004 was 34% higher than 2003. And the 2004 quantity number is 39% higher than 2003.
- all product lines have grown, except for classic cars and trains. For classic cars it is feasible to reduce the unit price in exchange for more sales and thus increase market share. For train, it is necessary to pay attention to marketing strategies in the next year.
- Discount is the key variable for maximum revenue.
- In NA territory Ships has best growth potential.



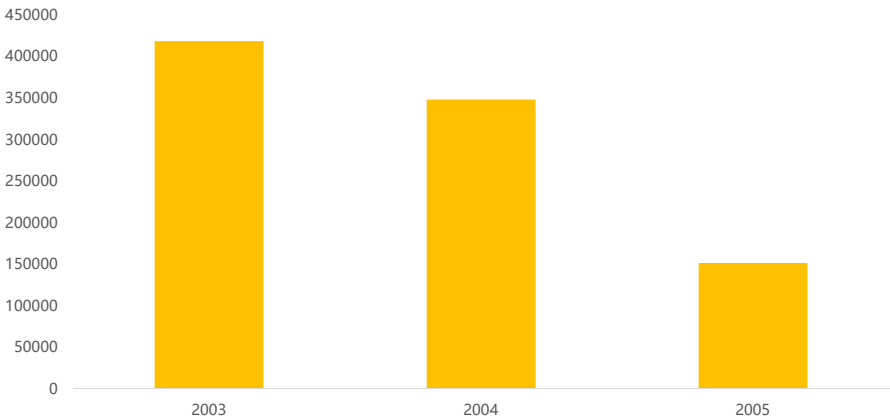
Business is the human activity related to material things. It is necessary for civilization.

TERRITORY-APAC

Overview



- The APAC territory total sale for 2004 was 16% lower than 2003. And the 2004 quantity number is 14% lower than 2003.
- Main Client : Australian collector co
- Main City: Singapore



TERRITORY-APAC

Product Analysis

	Product	Sales Growth/Decrease	Order Growth/Decrease
0	Classic Cars	-19.813521	-7.086614
1	Motorcycles	-21.790181	-24.825986
2	Planes	85.371786	81.702128
3	Ships	-92.304345	-86.206897
4	Trains	-100.000000	-100.000000
5	Trucks and Buses	44.515551	58.300395
6	Vintage Cars	-42.234523	-41.119860

APAC territory 2003- 2004 Product sales data

- Overall, all product lines decrease, except for Planes and Trucks and Buses. Among them, what needs to be taken seriously is that the sales of the train in 2004 is 0, and the sales of the ship and Vintage car also fall sharply. It is necessary to pay attention to marketing strategies in the next year, such as discount to enhance market competitiveness.

YEAR_ID
2003
2004

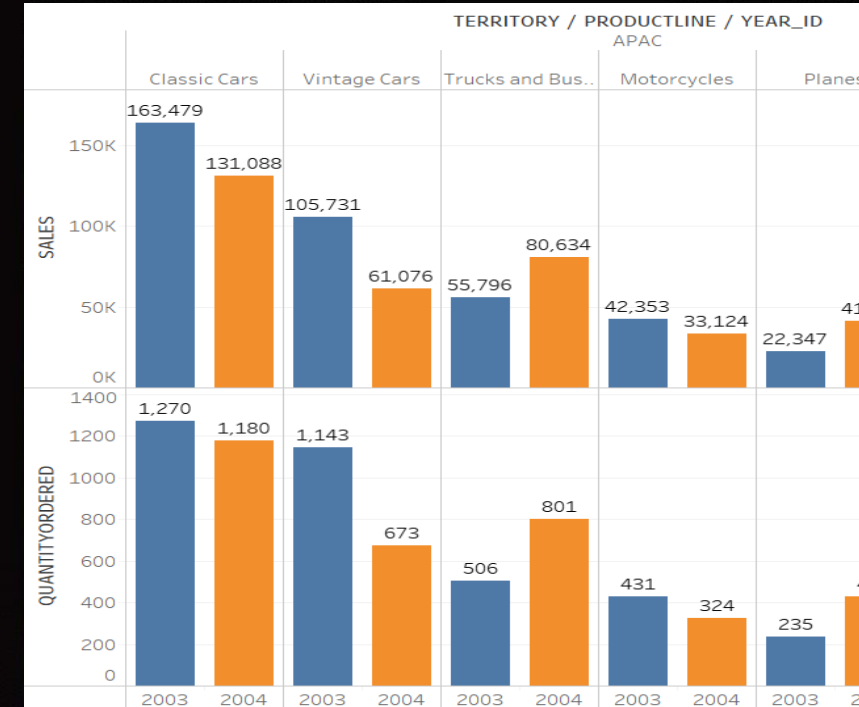


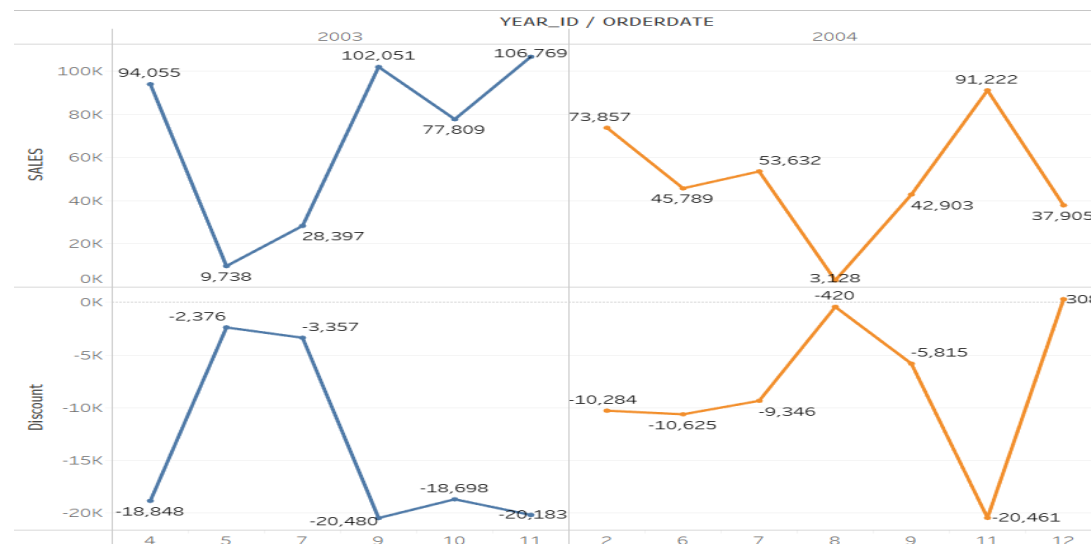


PHOTO FROM PIXABAY

TERRITORY-APAC

Sales vs Discount

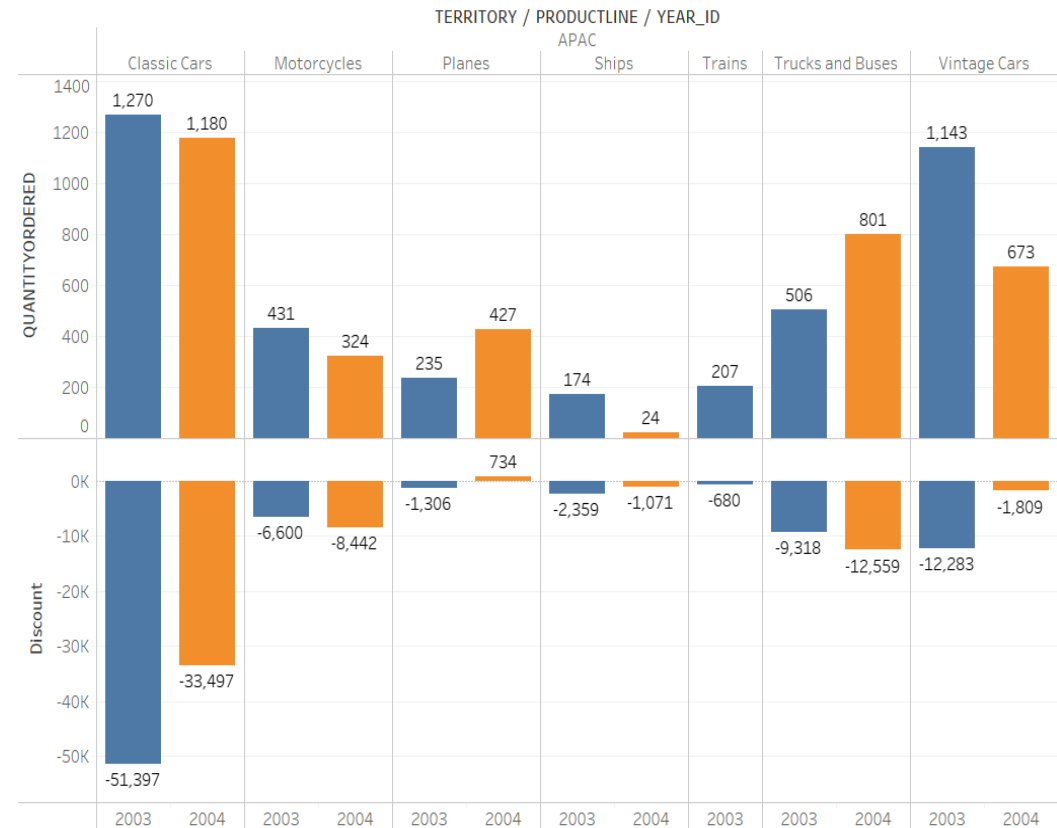
Look at the trend of Sales vs Discount in APAC territory from 2003 to 2004. The trend between discount and sales become very sharp, so it is clearly that discount is extremely important in this area. The sales peak corresponds to discount valley in 2003 April, September and November and in 2004 February, July and November. The discount valley corresponds to the sales valley in 2003 May and July and in 2004 August and December.



TERRITORY-APAC

Sale vs Discount

- Meanwhile, products' order number also strong relative with discount. Both Classic Cars and Vintage Cars' orders are decreased by the impact of discount reduction 7%- 40%. But Classic cars' impact is relatively small. Discount decrease for 34% only lead its order decrease for 7% which means this product' s order number is relatively stable, less growth space.
- Vintage Cars and trucks and buses receive large impact. For Vintage cars, discount decrease 85% leads orders decrease 40%. For trucks and buses, discount increase 34% leads 58% orders' increase.
- Planes' large increasement speed cannot be ignored, which is 81% higher than 2003 and 156% less discount than 2003.
- It is clear that in APAC territory Planes, Trucks and Buses have large growth potential.



SUMMARY

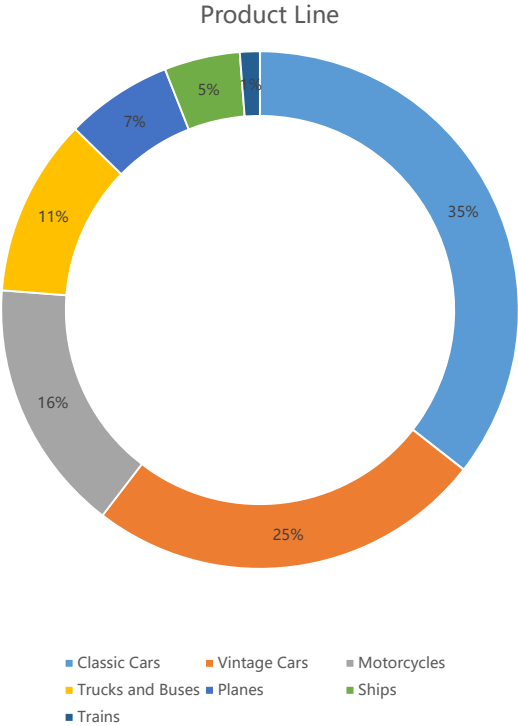
- The APAC territory total sale for 2004 was 16% lower than 2003. And the 2004 quantity number is 14% lower than 2003. All product lines decrease, among them what needs to be taken seriously is that the sales of the train in 2004 is 0, and the sales of the ship and Vintage car also fall sharply.
- Discount is the key variable for maximum revenue.
- In APAC territory Planes, Trucks and Buses have large growth potential



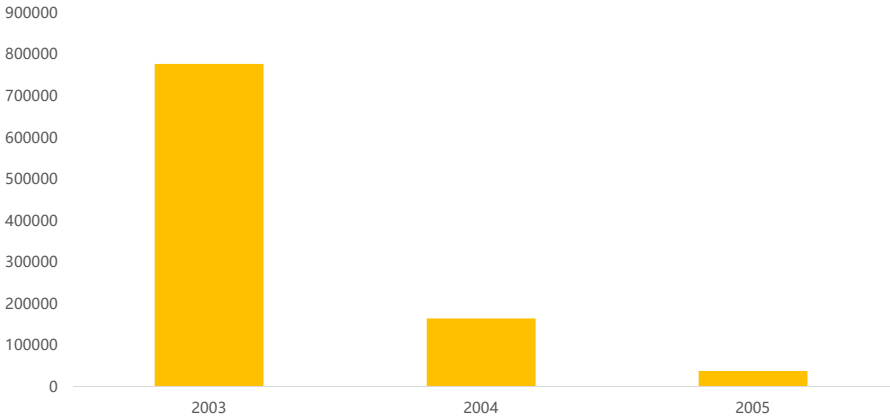
Business is the human activity related to material things. It is necessary for civilization.

TERRITORY-JAPAN

Overview



- The Japan territory total sale for 2004 was 112% higher than 2003. And the 2004 quantity number is 107% higher than 2003.
- Main Client : Tokyo collectables Ltd
- Main City: Minato-Ku



TERRITORY-JAPAN

Product Analysis

Japan territory 2003- 2004 Product sales data

Product line:

- Classic Cars: sale for 2004 was 8% lower than 2003. And the 2004 quantity number is 28% lower than 2003.
- Planes: sale for 2004 was 135% higher than 2003. And the 2004 quantity number is 154% higher than 2003.
- Motorcycles: sale for 2004 was 152% higher than 2003. And the 2004 quantity number is 123% higher than 2003.
- Vintage cars: for 2004 was 1000% higher than 2003. And the 2004 quantity number is 714% higher than 2003.
- Overall, all product lines have grown, except for classic cars. Although the sales of classic car have dropped, the drop percent is small, just 8%. Which means this product is relatively stable in Japan market. Another products planes, motorcycles and Vintage cars have 1x increasement, show large market potential. Trucks and Ships are lack of past year data, but compare with other territory, it has good sales performance.

YEAR_ID

2003
2004



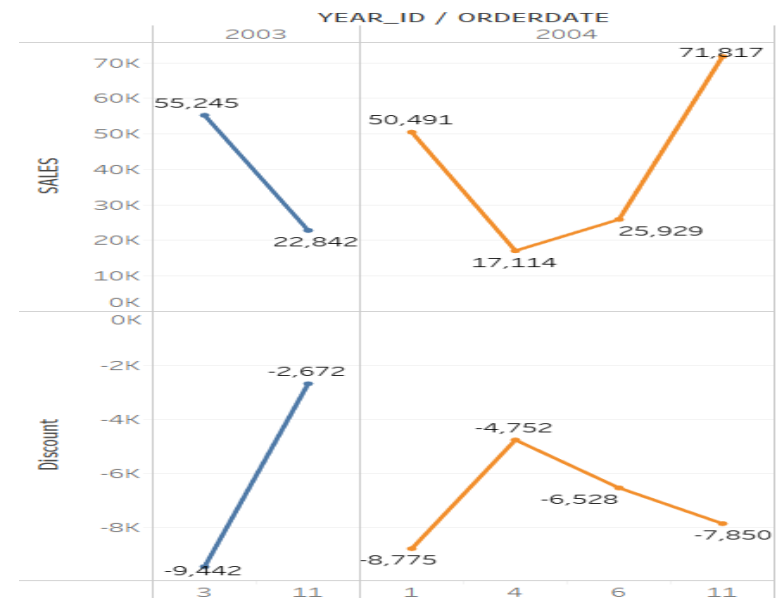


PHOTO FROM PIXABAY

TERRITORY-JAPAN

Sales vs Discount

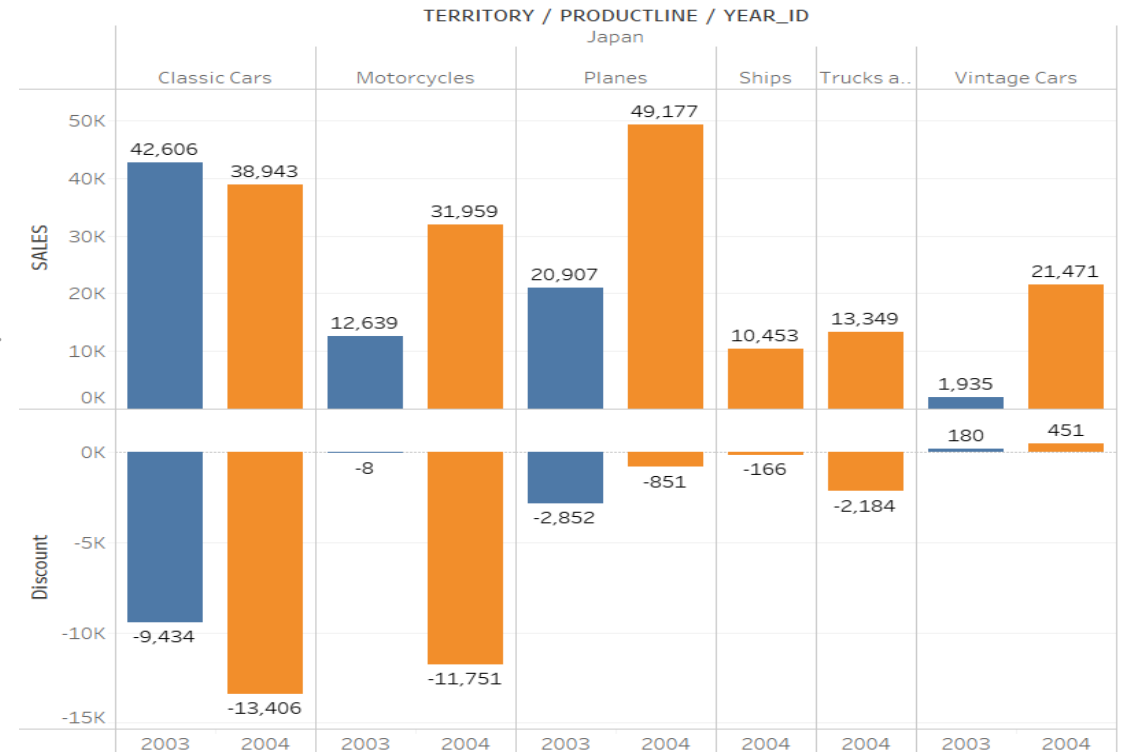
Look at the trend of Sales vs Discount in Japan territory from 2003 to 2004. It is clearly that sales are highly positive related with discount. The sales peak corresponds to discount valley in 2003 March and in 2004 January and November. The discount valley corresponds to the sales valley in 2003 November and in 2004 April.



TERRITORY-JAPAN

Sale vs Discount

- Meanwhile, all products 'order number also relative with discount.
- Classic Cars increase 42% discount, but orders decrease for 8%. Which indicates that less room for improvement.
- While, Planes have relatively large growth potential. As discount decrease for 70%, it' s order number can still increase to 135%. Vintage cars' order increase for 1000% , but discount decrease for 150%, show large market potential
- It is clear that in Japan territory Planes and Vintage cars have the best growing potential



SUMMARY

- The Japan territory total sale for 2004 was 112% higher than 2003. And the 2004 quantity number is 107% higher than 2003. All product lines have grown, except for classic cars. But the drop percent is small, just 8%. Which means this product is relatively stable in Japan market.
- Planes, motorcycles and Vintage cars have 1x increasement, show large market potential.
- Discount is the key variable for maximum revenue.
- In Japan territory Planes and Vintage cars have the best growing potential



Business is the human activity related to material things. It is necessary for civilization.



SALES PREDICTION

2005 Q3 -2006 Q4

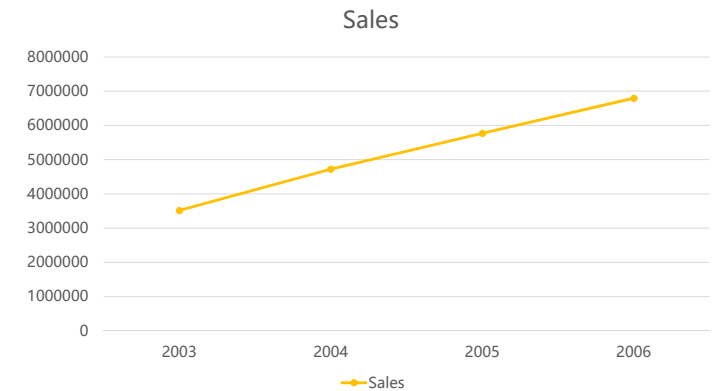
SALES PREDICTION

1

METHOD AND TOOL

- Confidential Interval (95%)
- Tableau Analysis (forecast)

3



2

IMPORTANT FEATURE FOR SALES PREDICTION

- Discount (PRICEEACH-MSRP)
- Order Date
- Country, city
- Product line, Product code

Year	ATTR	SALES
2003	Actual	3,516,979.54
2004	Actual	4,724,162.60
2005	Estimate	5,243,241.11
2006	Estimate	6,197,075.23



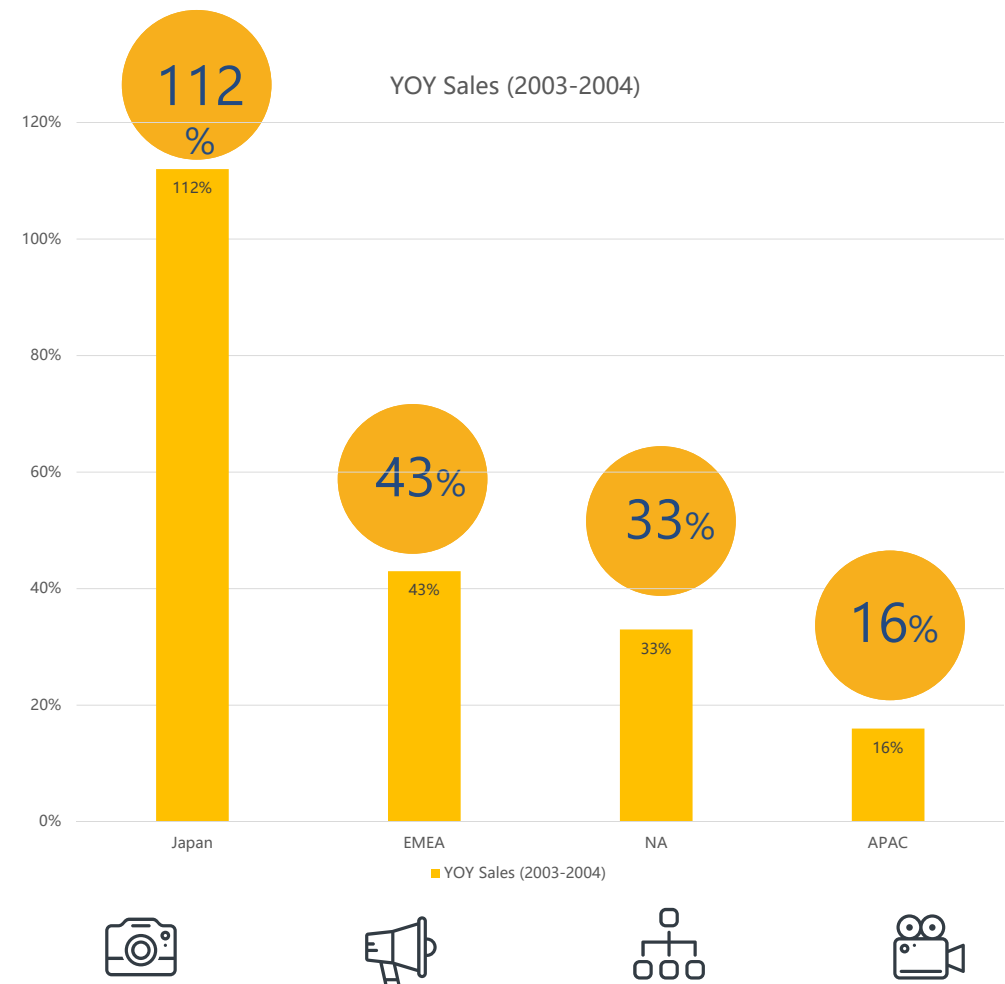
POTENTIAL TERRITORY

Japan

POTENTIAL TERRITORY-JAPAN

Based on 2003-2004 data

- Japan has the highest sales growth rate, 112%.
- Compare with other territory, Only Japan has 3 product increasing rate more than 1x.
- One explanation for lack Ships and Trucks' 2003 year' s sales data is that these two products maybe just enter the Japanese market, but, it has a good sales performance.



Summary

Potential product for each territory



Key Variable for maximum revenue
Discount

Potential Territory
Japan





WATCHING