



# ADVENTURE HARDWARE G

DATA VISUALIZATION & FORECASTING

DELIVERED BY SAMUEL ATAM ON BEHALF OF PAIRVIEW LIMITED

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Adventure Hardware Group (AHG) is a global manufacturing organization with operations in America, Europe, and Asia. AHG is an online specialty retailer and reseller of Road bikes, Mountain bikes, Touring bikes, components, accessories, and clothing (Cycling products). We deliver the personalized service of the best local shops, but with a dynamic, interactive experience only possible on the web – specially designed to make you knowledgeable and confident about every product we sell.

**4 Years in  
Business**

**10 Regions**

**2 Channels  
(Online &  
Reseller)**

**3 types of  
Bikes**

**35 Sub-  
Categories**

**18,040  
Customers**



- AHG is an established bicycle specialty store, offering retail sales of new bicycles, parts and accessories, clothing, and component.
- This analysis shows the financial plan using a business intelligence tool. This fact-finding is to ascertain how **AHG has been experiencing a shift in the marketplace towards digital as well as a change in customer demographic, possibly leading to declining in its store sales.**
- This report shows that Across the globe, AHG sales have grown 98% from the end of 2011 to 2013 (62% Online and 118% Reseller).
- There is a clear drift between **May 2013 and July 2013**, With Australia leading the regions with 35.79% of profit, the percentage of Online transactions increased by 360%.
- This shift was achievable by introducing product categories like Accessories and clothing, which were widely accepted and increased transaction sales. Additionally, as of November 2013, a change in the bicycle segment is seen, surpassing online sales to reseller channels.
- To have a comprehensible discernment, the use of charts were used to understand the analysis in Customer Demography like **Income Earners, Gender, Occupation, Marital status, Commuter Distance, No of Children, and Education.** The highest volume of sales (%) was recorded in Education.

# Executive Summary



The Bike Sales represent 86.1%. It is distributed by the following channels.

- Online: it represents 26.60% of sales, however, the profit represents 118% of total sales.
- Reseller: It represents 73.40%, however, the profit is negative for 118% of total sales.
- Australia is the region with the highest online sales since 2011 with a total of 8.21% of total online sales and the South-west in the US is the region with the highest reseller sales since 2Q-11 with a total of 16.85%.
- Competitor Analysis was used to examine AHG competitors' features, market share, pricing, marketing, differentiators, strengths, weaknesses, geography, culture, and customer reviews.
- **5 - year forecasts:**
  - Online: UK, France, Germany, Southwest US, Northwest US, Canada, Australia, and Southwest US show an increment of 134%, 135%, 127%, 89%, 85%, and 56% respectively in revenue. Central is practically NULL.
  - Reseller: UK, France, Northwest US, Southwest US, and Central US show an increment of 114%, 46%, 42%, &1, and 98% respectively. Australia and Germany 5 Year forecasts are not reliable.
- **Market Basket Analysis**

The Product to be sold together based on profitability are the following:

Transactions that include Hydration Pack>

  - Bike Wash/Classic Vest/12% Hitch Rack

Transactions that include Mountain Tire Tube>

  - Mountain Tires/Fender Set/Water Bottle Cage Water Bottles



# Table of Contents



## Financial and Demographic Performance



### Revenue, Cost & Profit by Channels

Channels	Revenue	COGS	Total Profit
Online	\$29,358,677	\$17,670,734	↑ \$11,687,943
Reseller	\$81,015,212	\$82,803,743	↓ (\$1,788,531)
<b>Total</b>	<b>\$110,373,889</b>	<b>\$100,474,478</b>	<b>\$9,899,412</b>

### Product Category Sales & Profit by Channels

Channels	Revenue	Total Profit	%CT Revenue
<b>Online</b>	<b>\$29,358,677</b>	<b>\$11,687,943</b>	<b>26.60%</b>
Accessories	\$700,760	↘ \$438,675	0.63%
Bikes	\$28,318,145	↑ \$11,112,856	25.66%
Clothing	\$339,773	↘ \$136,413	0.31%
<b>Reseller</b>	<b>\$81,015,212</b>	<b>(\$1,788,531)</b>	<b>73.40%</b>
Accessories	\$578,001	↘ \$204,408	0.52%
Bikes	\$66,827,669	↓ (\$2,681,821)	60.55%
Clothing	\$1,801,734	↘ \$193,434	1.63%
Components	\$11,807,808	↘ \$495,448	10.70%
<b>Total</b>	<b>\$110,373,889</b>	<b>\$9,899,412</b>	<b>100.00%</b>

### Comments

- **Reseller:** it represents **73%** of sales, however, the profit is negative.
- **Online:** it represents **27%** of sales, however, the profit is positive **+124%**.
- **Bikes Category** it represents **86%** of the sales and the online market is the only one profitability.



## Region sales & Profit Channels

Channels	Revenue	COGS	%CT Total Profit	Total Profit
☐ Online	\$29,358,677	\$17,670,734	118.07%	\$11,687,943
Australia	\$9,061,001	\$5,518,024	35.79%	\$3,542,976
Southwest	\$5,718,151	\$3,402,791	23.39%	\$2,315,360
Northwest	\$3,649,867	\$2,173,755	14.91%	\$1,476,112
United Kingdom	\$3,391,712	\$2,048,959	13.56%	\$1,342,753
Germany	\$2,894,312	\$1,746,456	11.60%	\$1,147,856
France	\$2,644,018	\$1,601,926	10.53%	\$1,042,092
Canada	\$1,977,845	\$1,166,195	8.20%	\$811,649
Southeast	\$12,239	\$7,054	0.05%	\$5,185
Northeast	\$6,532	\$3,776	0.03%	\$2,757
Central	\$3,001	\$1,798	0.01%	\$1,203
☐ Reseller	\$81,015,212	\$82,803,743	-18.07%	(\$1,788,531)
Northwest	\$12,523,063	\$12,546,586	-0.24%	(\$23,523)
Germany	\$2,051,548	\$2,125,935	-0.75%	(\$74,387)
United Kingdom	\$4,311,127	\$4,389,853	-0.80%	(\$78,726)
Australia	\$1,622,869	\$1,703,056	-0.81%	(\$80,187)
France	\$4,647,454	\$4,756,535	-1.10%	(\$109,081)
Southeast	\$7,908,318	\$8,023,658	-1.17%	(\$115,340)
Central	\$7,932,852	\$8,049,662	-1.18%	(\$116,810)
Northeast	\$6,956,674	\$7,205,092	-2.51%	(\$248,418)
Canada	\$14,463,280	\$14,785,259	-3.25%	(\$321,979)
Southwest	\$18,598,027	\$19,218,108	-6.26%	(\$620,081)
Total	\$110,373,889	\$100,474,478	100.00%	\$9,899,412

### Comments

- **Regions:**
- **Online Market** - Australia is the largest seller with 8.21% (\$9M) of sales being also the most profitable region with 35% (\$3.5m) of the total profit.
- **Reseller Market** - The combination of regions in the US and Canada have the largest sales by difference (84% of Total Sales). Overall there is no profit in Reseller Market with 18% profit loss.



# Is there a shift towards Digital?

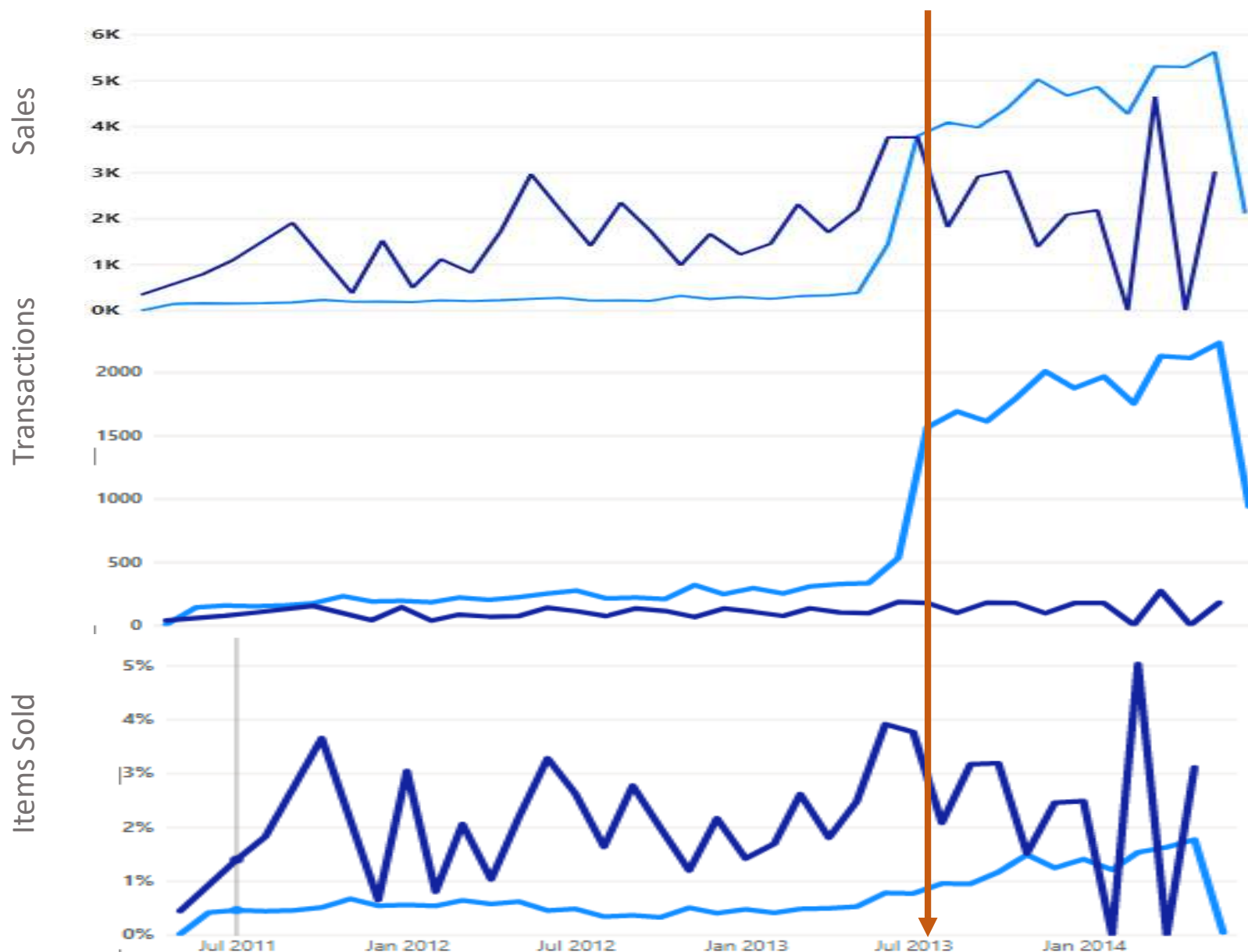


**YES**

# Is there a shift towards Digital?



Volume of Sales, Items Sold & Transaction by Channels YoY



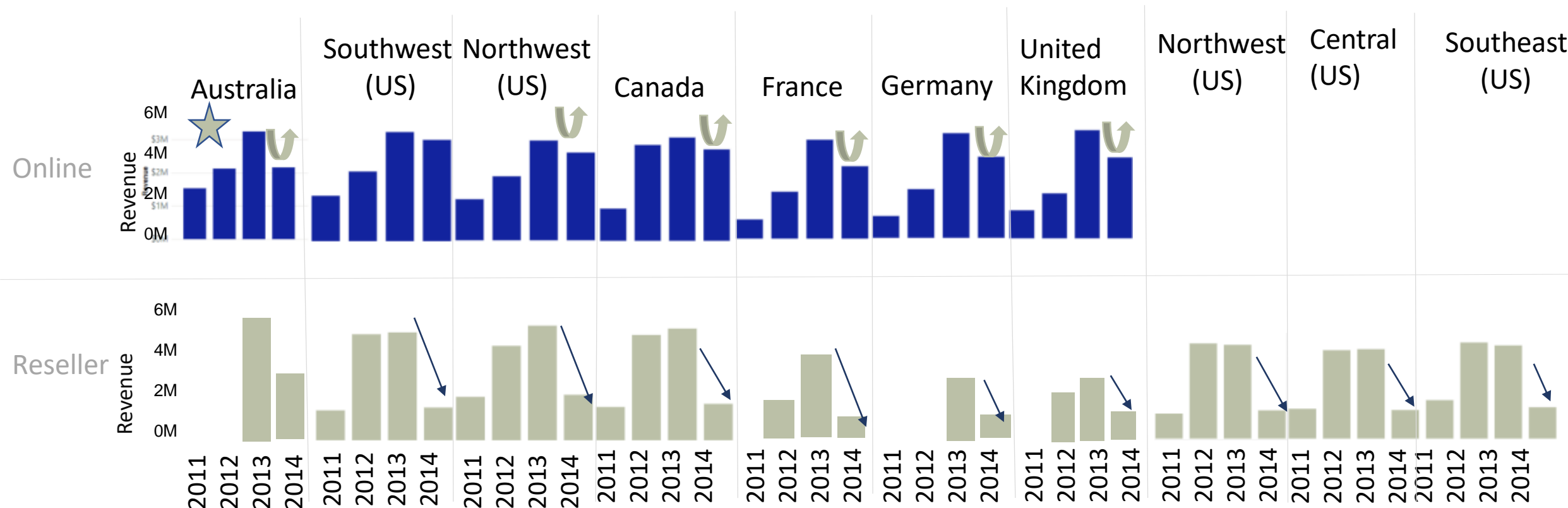
## Comments

- There is a clear shift between May 2013 and July 2013. The number of Online Transactions increased rapidly.
- In July 2013, the number of sales online exceeded the number of reseller sales for the first time.
- In June 2013 against May 2013, the increase of online sales was 48%.

# Is there a shift towards Digital?



## What is driving the Shift? By Regions:



### Comments:

- The Reseller sales was down which made the Online sales soar . Generally, 2014 had a negative effect on AHG sales.
- Australia had a better conversion from reseller to online market.

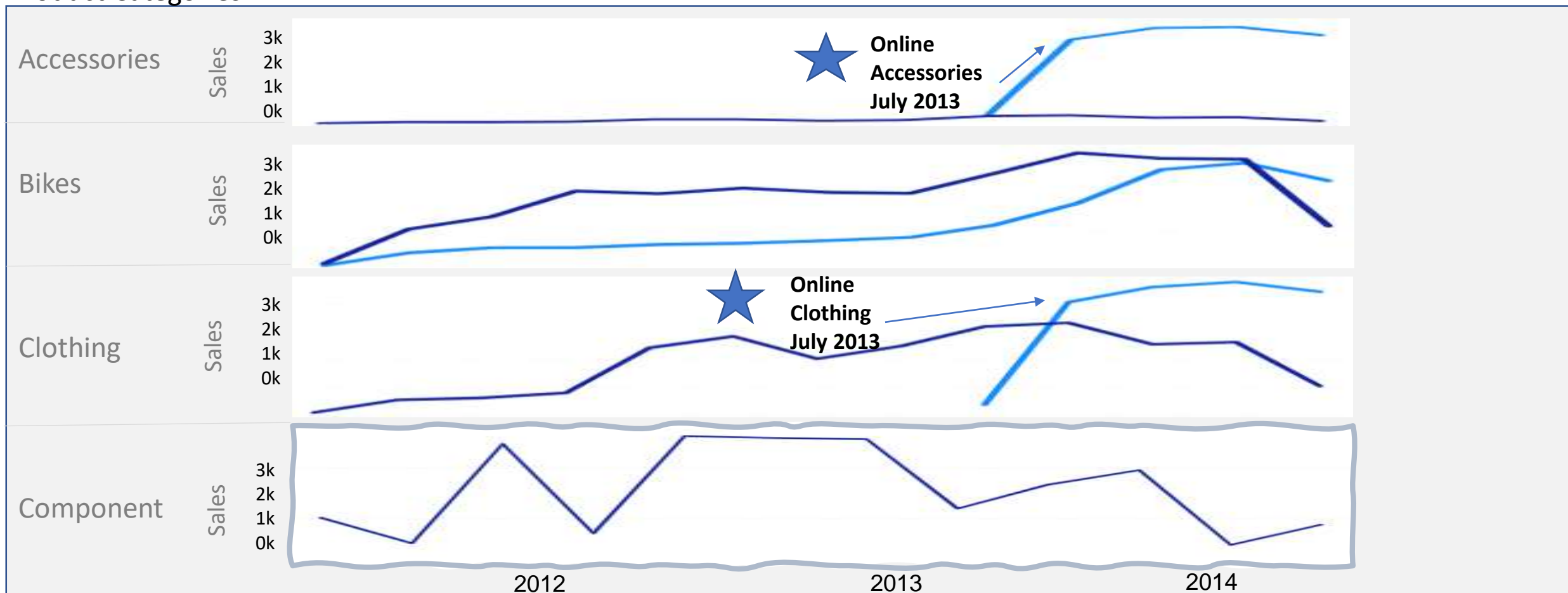
# Is there a shift towards Digital?

What is driving the Shift? By Product Category:

Volume of Sales by Product Category YoY

Online  
Reseller

Product Categories



Comment

There is a shift towards online market for bikes and Accessories trending upwards in April 2013 rising by 195% and 771% respectively. The Component segment recognized a new market in the Online sales channel.



# INFOGRAPHIC



## Financial and Demographics Performance

Is the Business Making Profit?

# Is the business making profit?



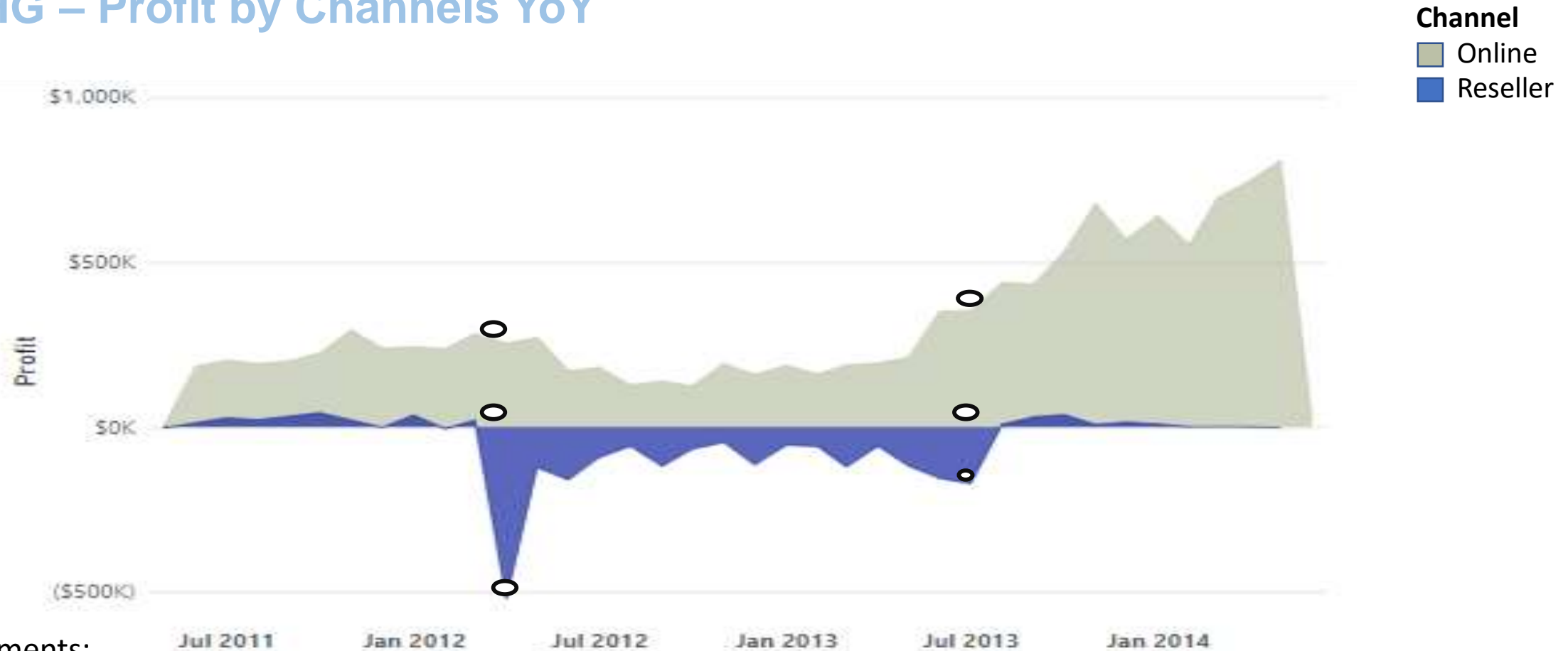
## RELATIVELY



# Is the business making profit?



## AHG – Profit by Channels YoY



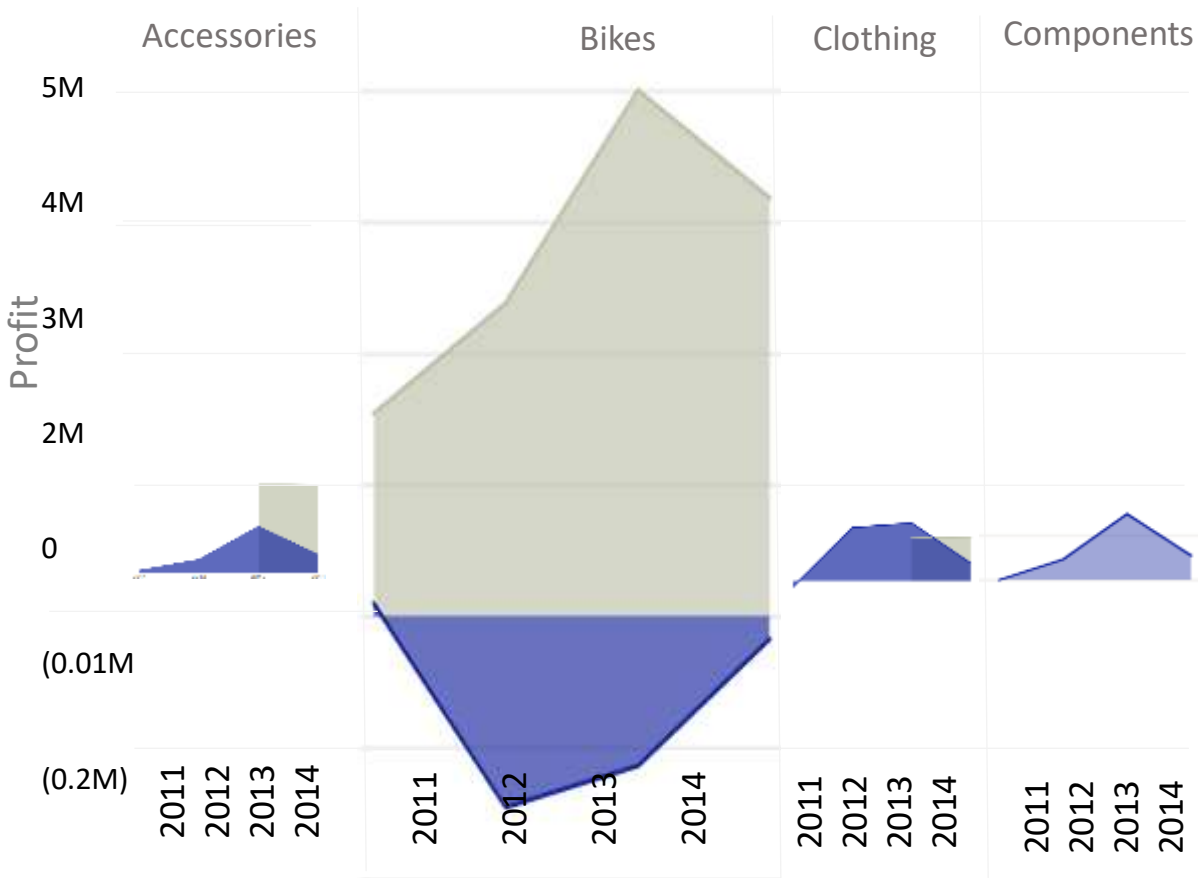
### Comments:

- Online: The online measure report shows growth from \$175K in June 2011 to \$809k in May 2014, Total Profit for Online (349.89% increase) and Reseller (20.59% increase) both trended up between May 2011 and June 2014.
- Reseller: The report shows a continuous decline in monthly profit. Total Profit for Reseller started trending up in June 2013, rising by 105.24% (\$163,956) in 2 months

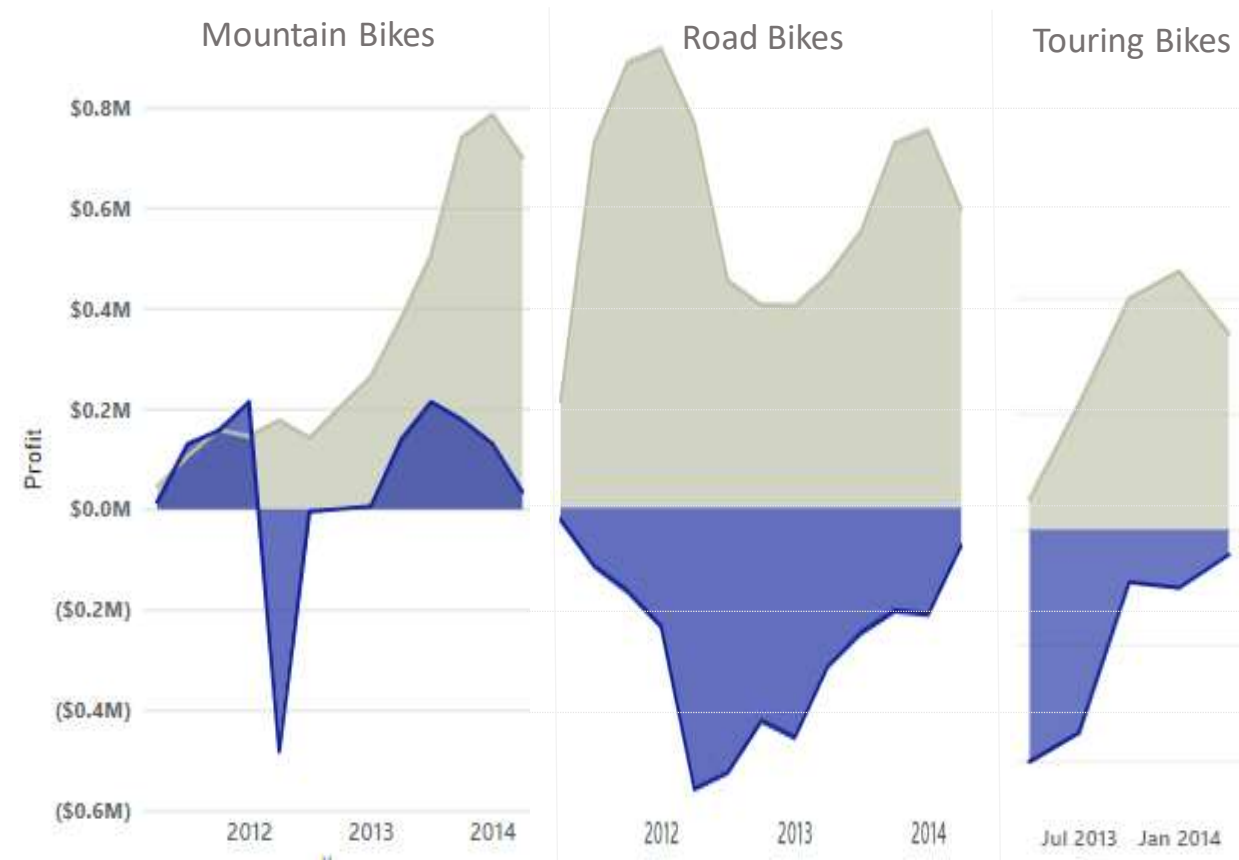
# Is the business making profit?



AHG- Product Category Profit by Channels YoY



AHG- Bike Category Profit by Channels YoY



## Comments

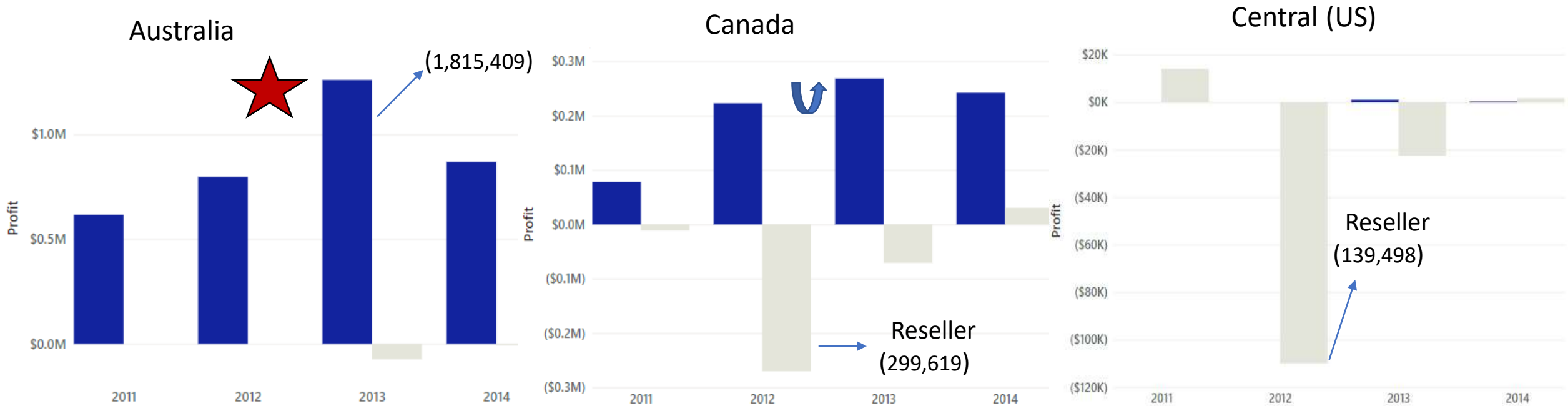
- **Bikes Market Reseller:** Total Profit for Reseller started trending up in January 2013, rising by 491.84% (\$28,986) in 5 quarters.
- Total Profit for Reseller started trending up in January 2013, rising by 491.84% (\$28,986) in 5 quarters.
- Total Profit for Online (1,424.55% increase) and Reseller (134.39% increase) both trended up between April 2011 and April 2014.



# Is the business making profit? - Region



Channels  
■ Online  
■ Reseller

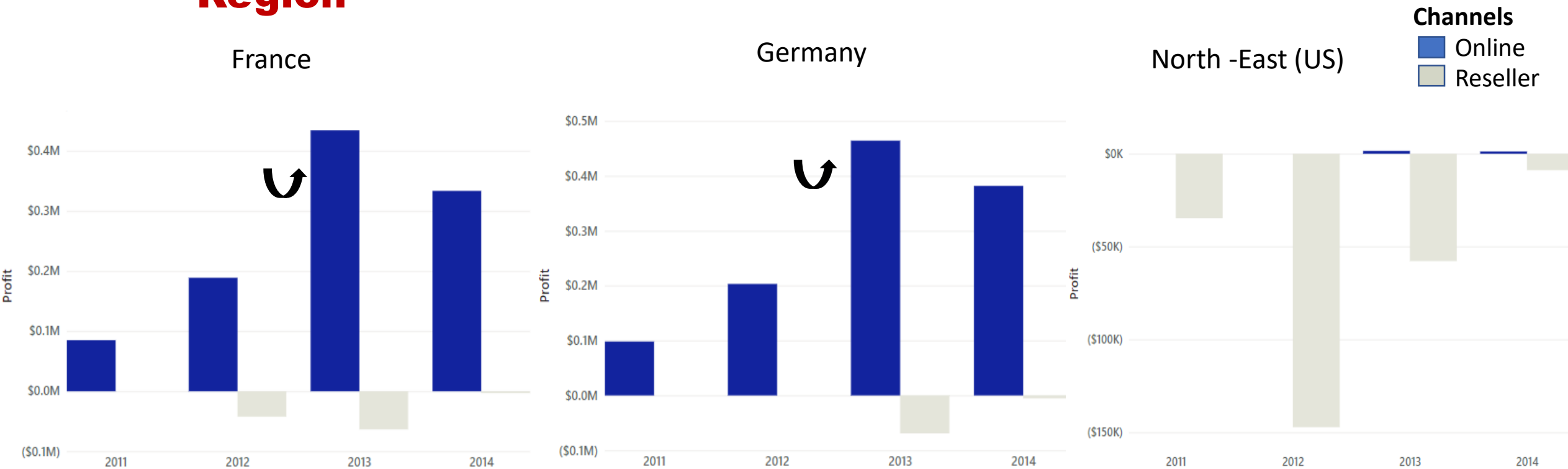


Comments:

Online: Australia made up 97.79% profit, while Canada made up 71.60% of Total Profit.

# Is the business making profit? –

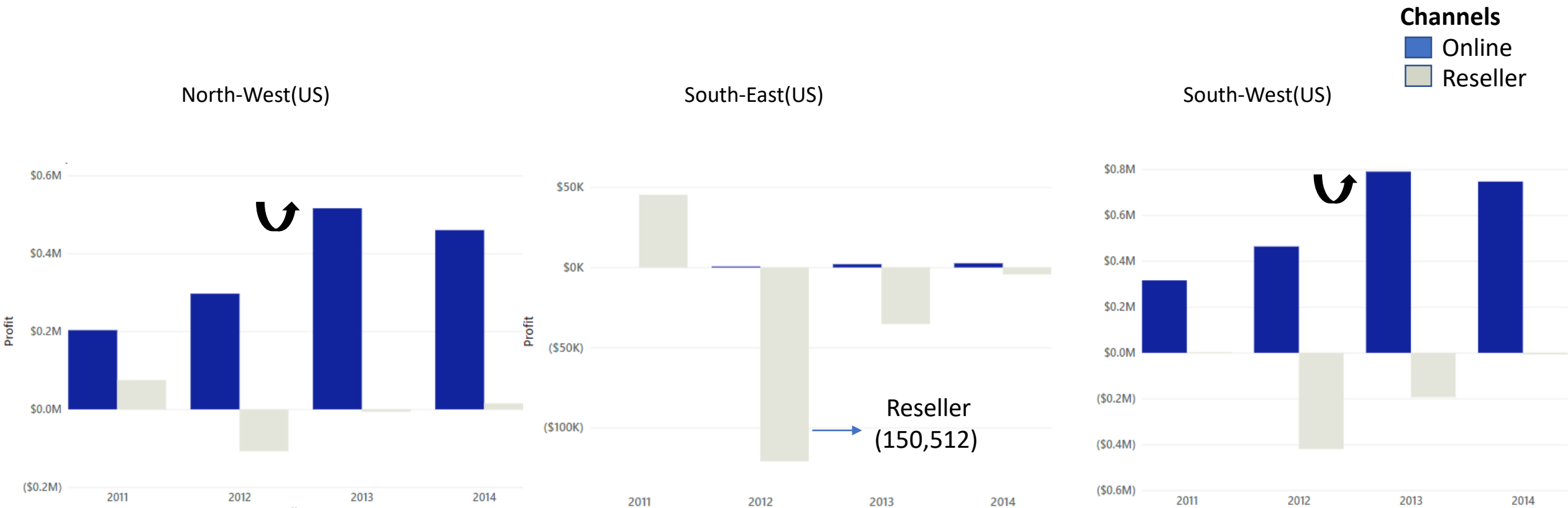
## Region



### Comment:

- North-East US had The most recent Profit anomaly in 2012 when Reseller had a low of (\$147,168). Reseller (74.57% increase) trended up while Online (22.30% decrease) trended down between 2011 and 2014.
- France: Online (292.65% increase) and Reseller (92.46% increase) both trended up between 2011 and 2014. Profit for resellers started trending up in 2012, rising by 92.46% (\$39,099) in 2 years.

# Is the business making profit? - Region



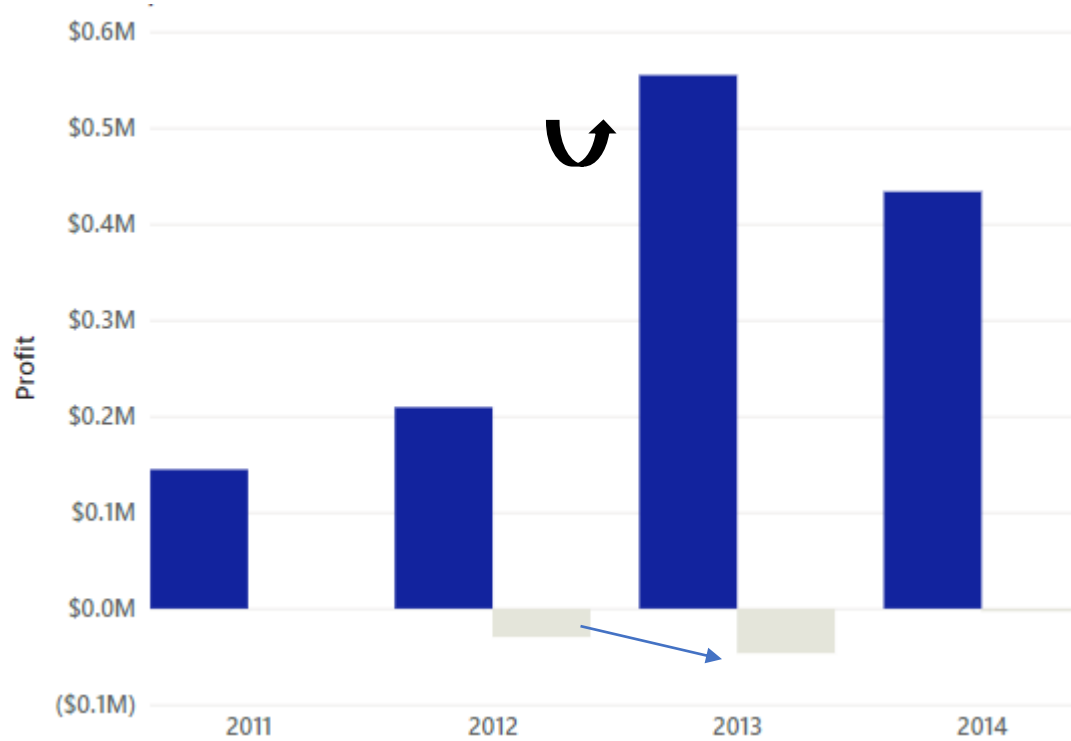
## Comment:

- South-east Online (335.94% increase) trended up while Reseller (109.66% decrease) trended down between 2011 and 2014. Profit anomaly was in 2012 when Reseller had a low of (\$120,996).
- North-West Us: Online (126.39% increase) trended up while Reseller (79.62% decrease) trended down between 2011 and 2014.

# Is the business making profit? - Region



United Kingdom



Channels

Online  
Reseller

## Comments

The UK experience an increase in online sales between 2012 and 2013 with a 199% increase. Total Profit for resellers started trending up in 2012, rising by 90.34% (\$26,664) in 2 years.



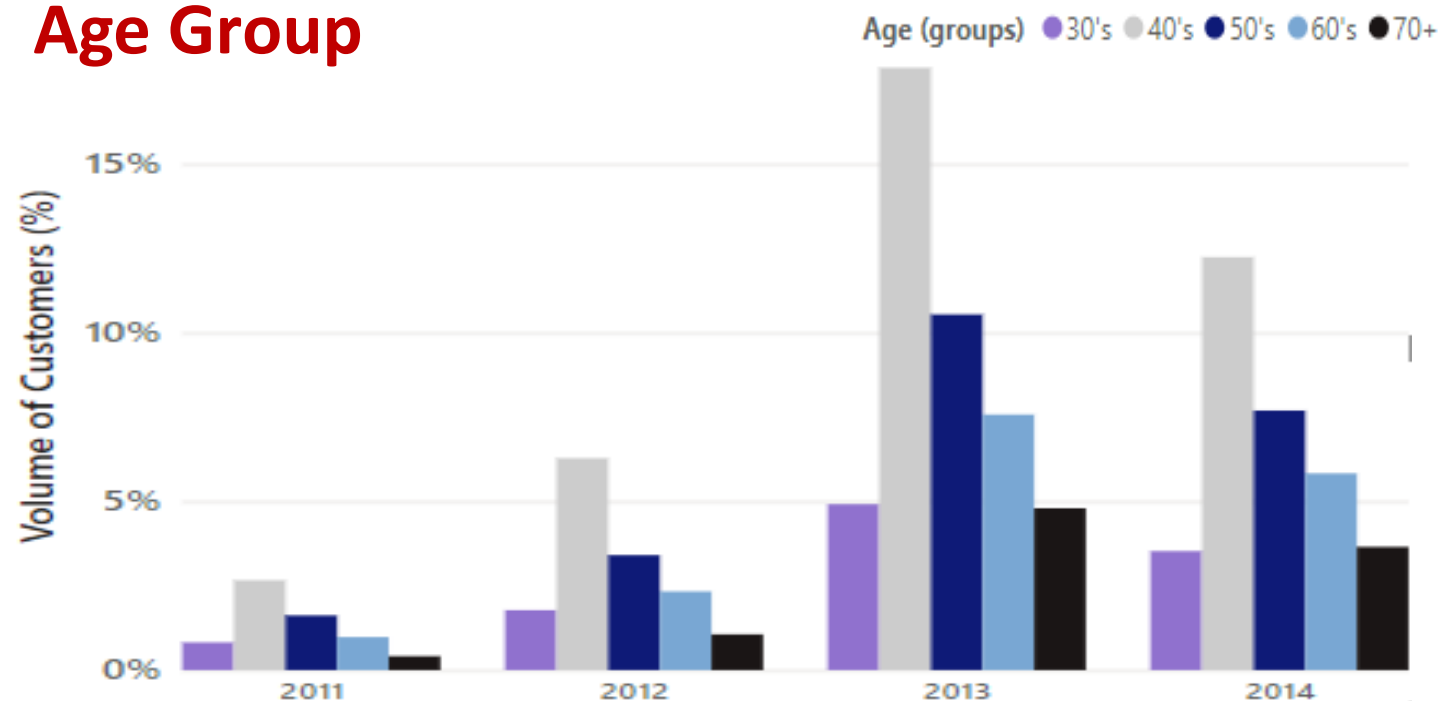
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## Customer Demographics - Online



## YoY Volume of Customers and Sales by Age Group



## Average Age of Customer YoY



### Comments

- Across all metrics, Average Age had the most interesting recent trend and started trending up in 2011, rising by 4.05% (2.07) in 3 years.

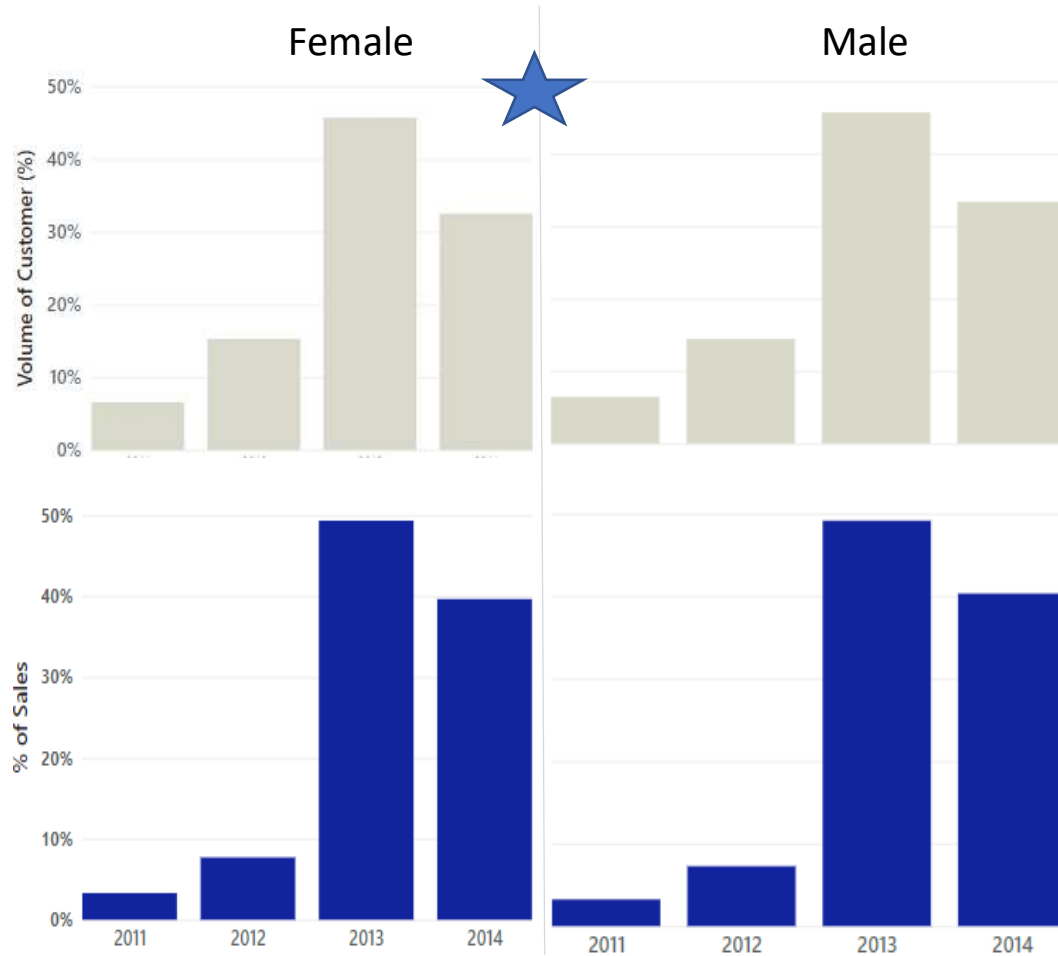
**NOTE:** Average Age jumped from 51.24 to 53.31 during its steepest incline between 2011 and 2014.

The decline in sales over the year was seen in the Age group of 30's

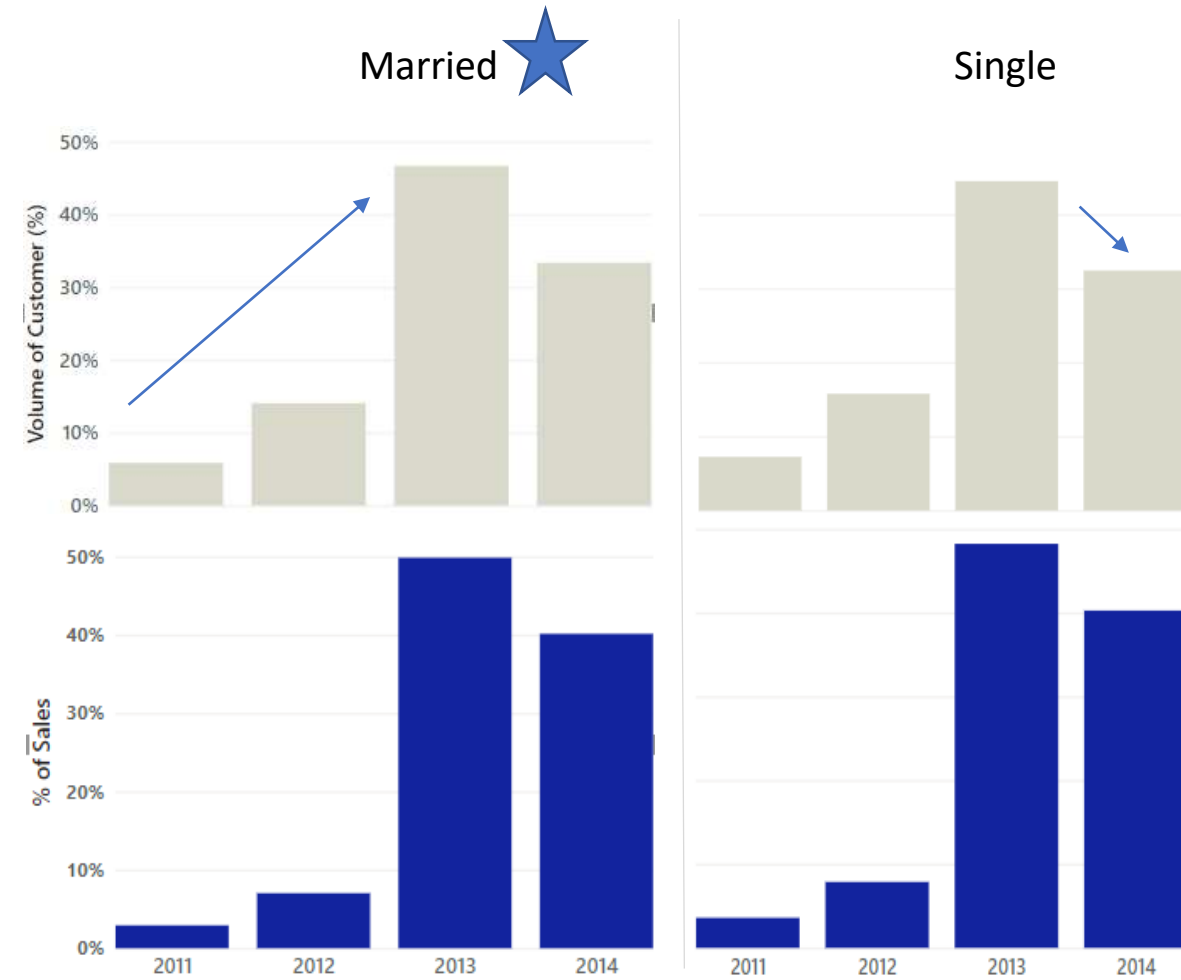
# Customer Demographics - Online



Volume of Customer and Sales by **Gender**



Volume of Customer and Sales by **Marital Status**



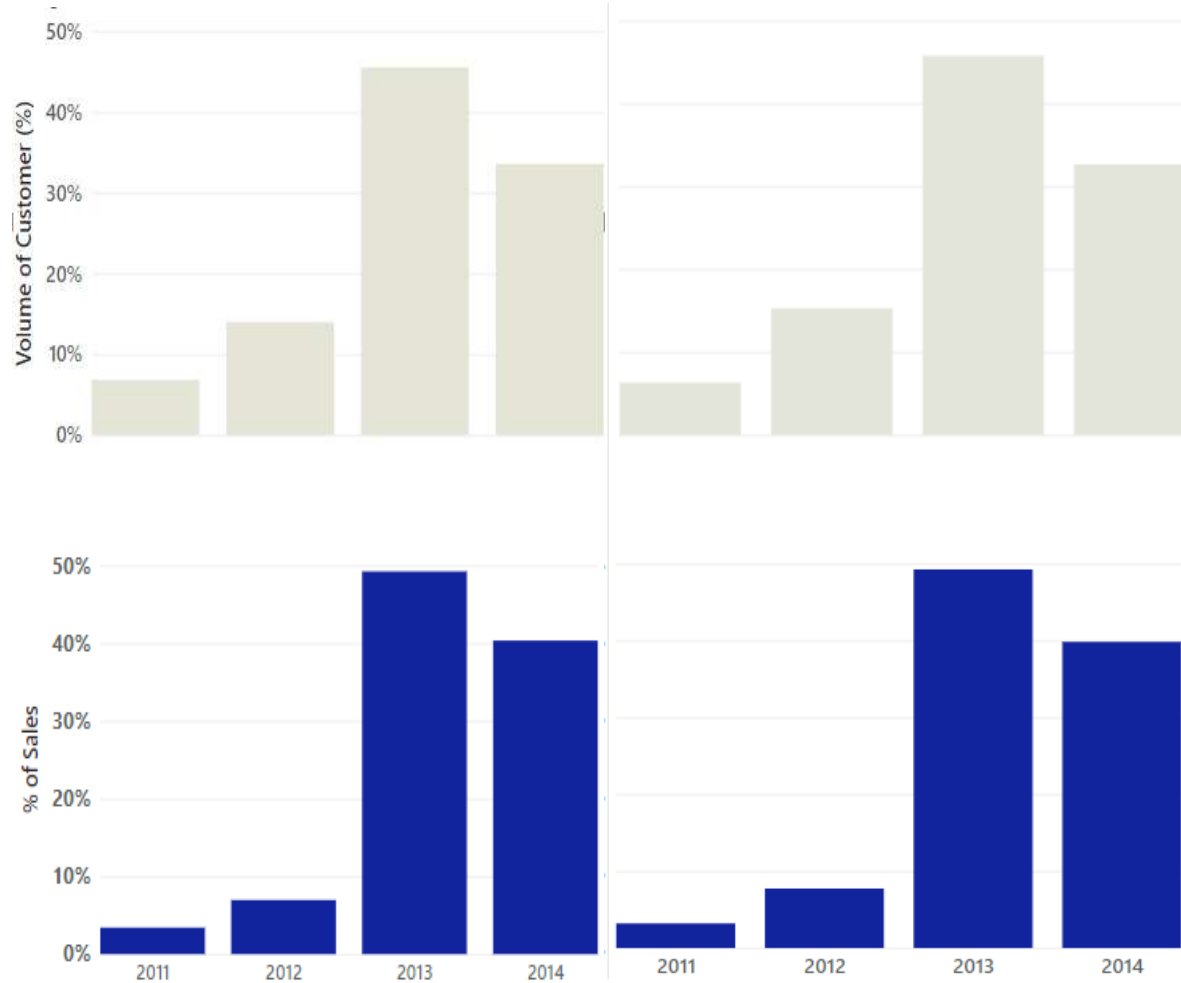
## Comments

Gender : The male accounted for 50.70% which was like the female.

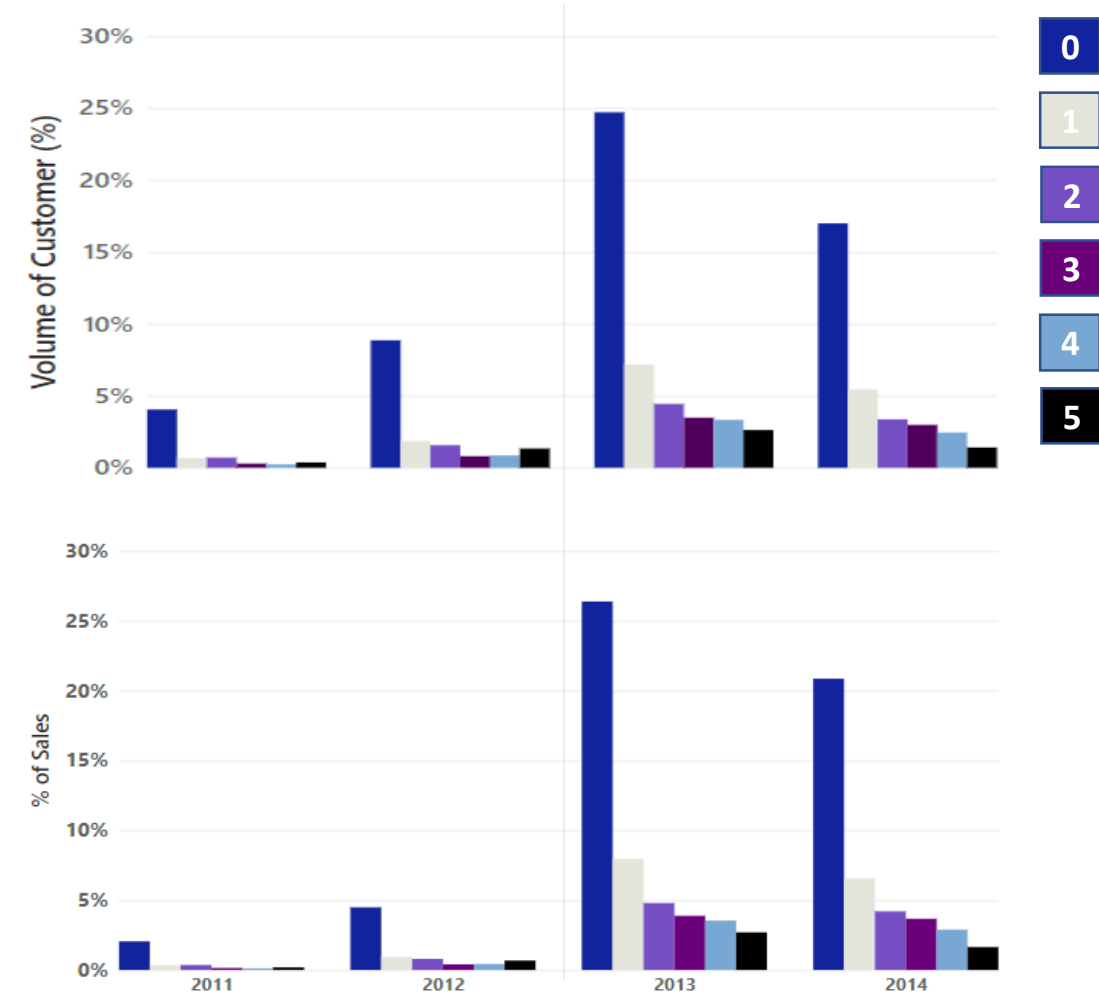
Marital Status: Married category accounted for 54.54% of customers



## Volume of Customer and Sales by House Owner



## Volume of Customer and Sales by Total Children



### Comments

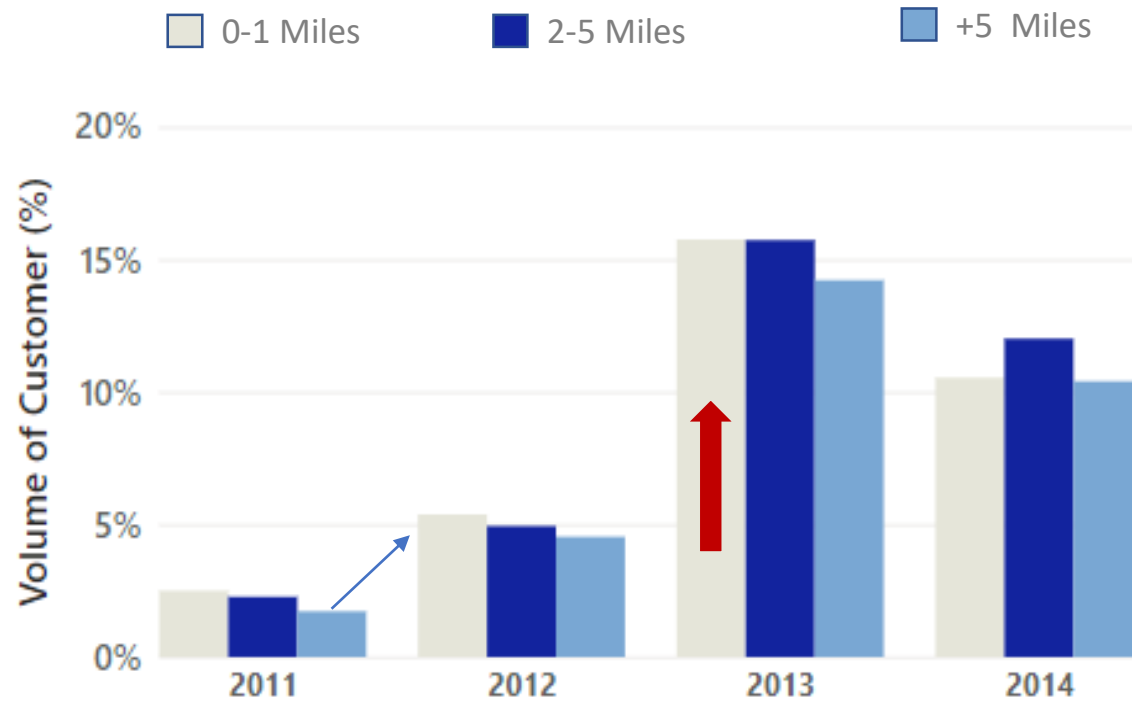
The home-owners accounted for 67.28% of volume of customers although no significant changes over the years across No of Children



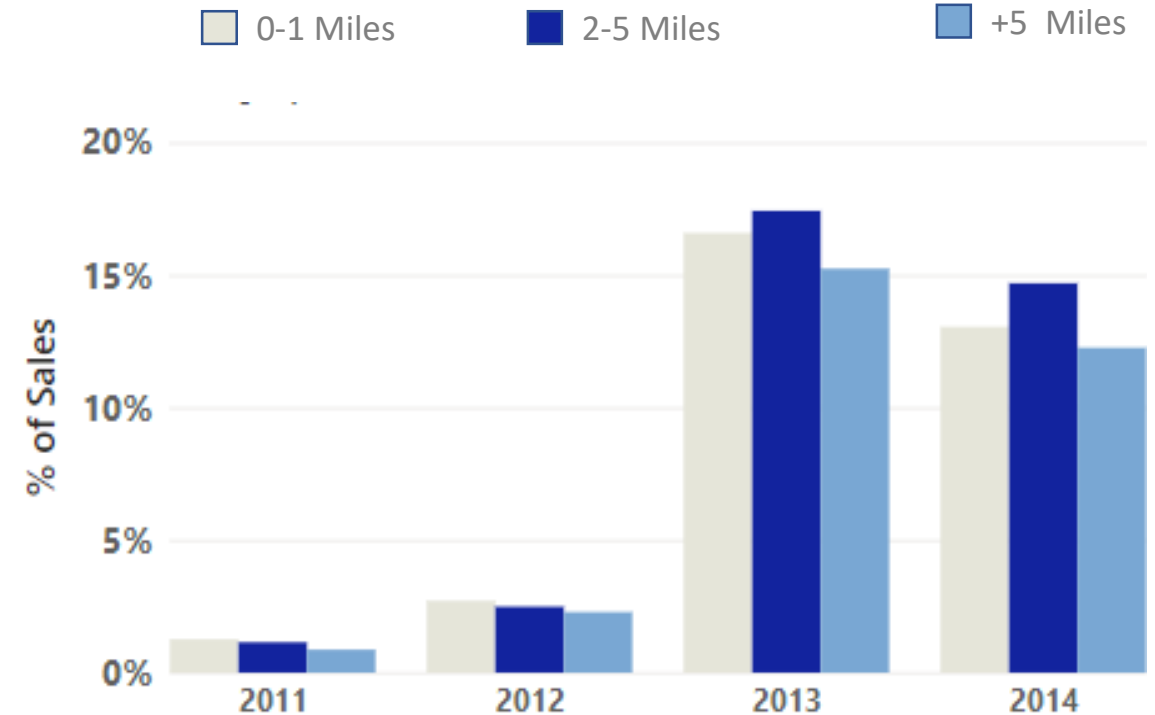
# Customer Demographics - Online



Volume of Customer and Sales by **Commute Distance**



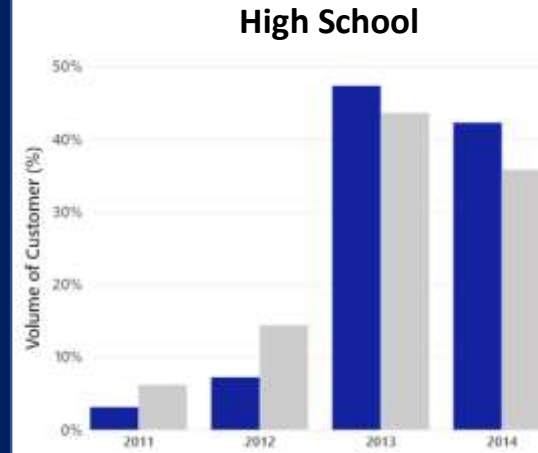
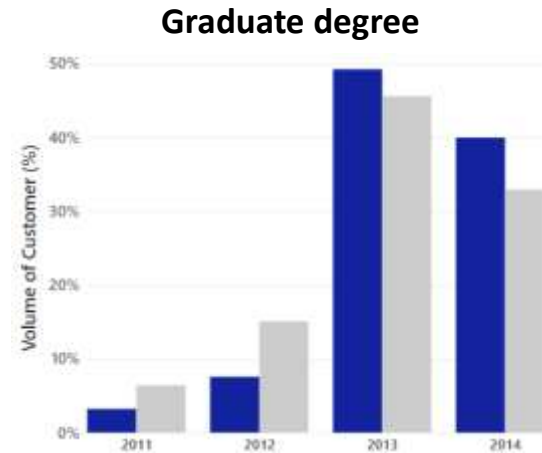
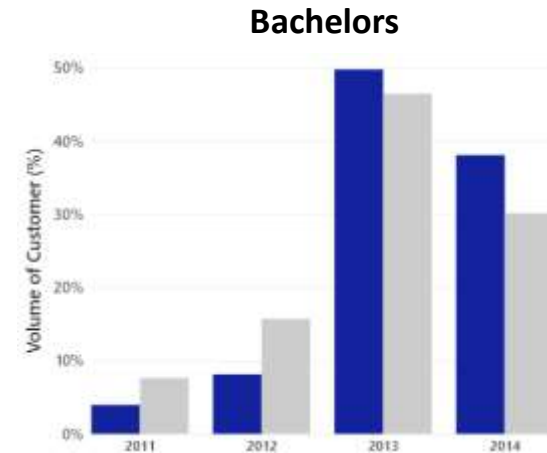
% of Sales **Commute Distance**



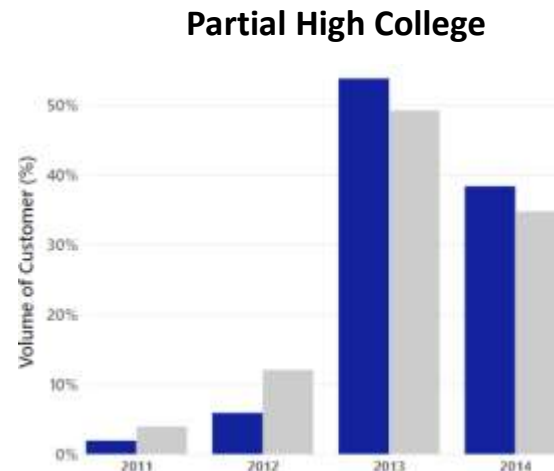
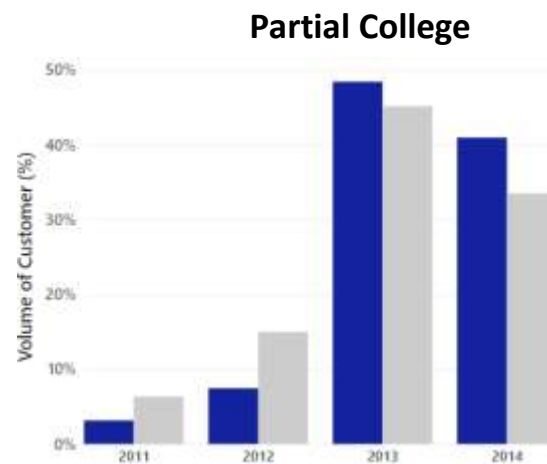
# Customer Demographics - Online



## Volume of Customer and Sales by Education



■ Volume of Sales %  
■ Volume of Customer %



### Comments

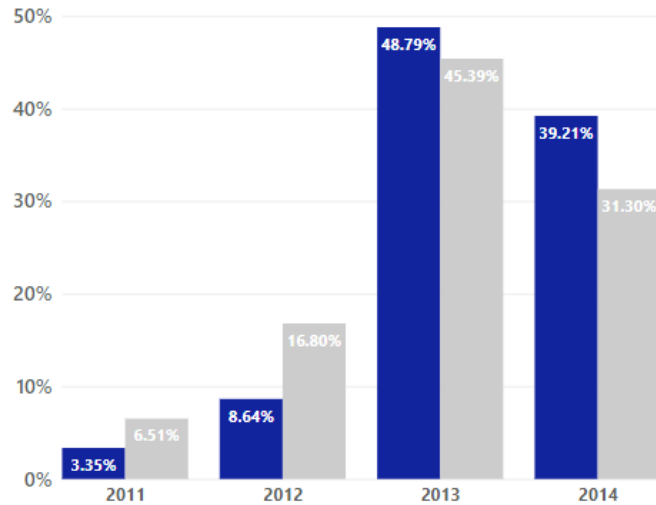
- Education: Bachelors accounted for 28.23% which was hasn't changed over the across the period.

# Customer Demographics - Online

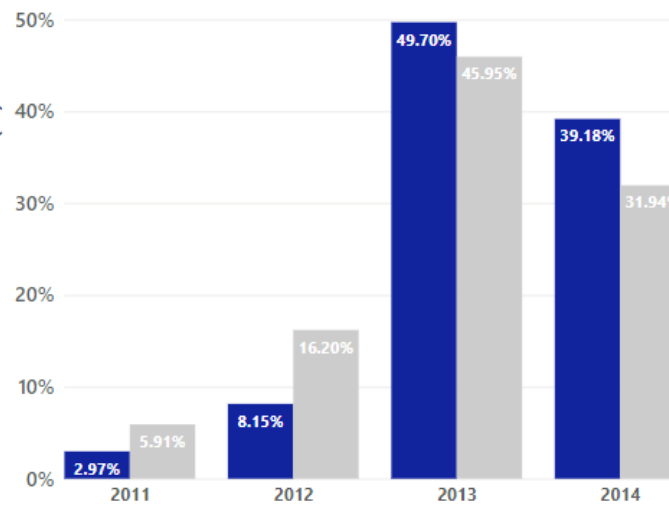


## Volume of Customer and Sales by Occupation

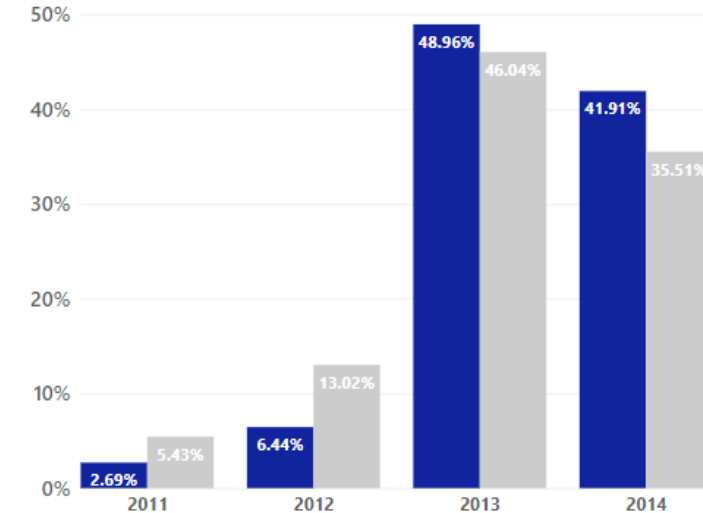
### Clerical



### Management

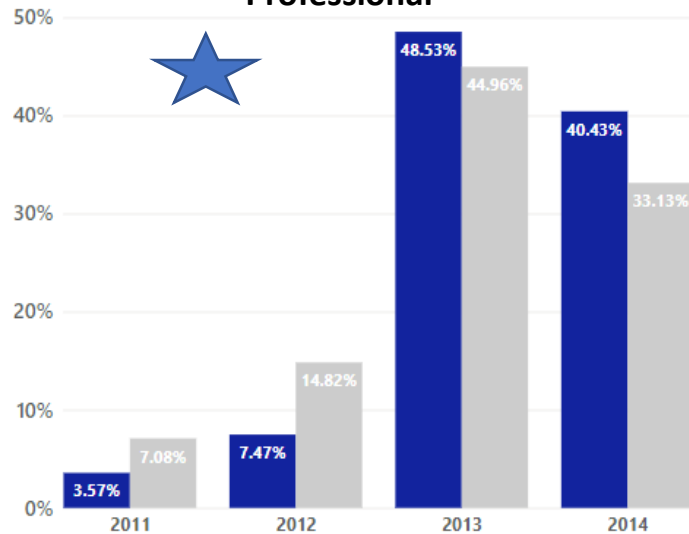


### Manual

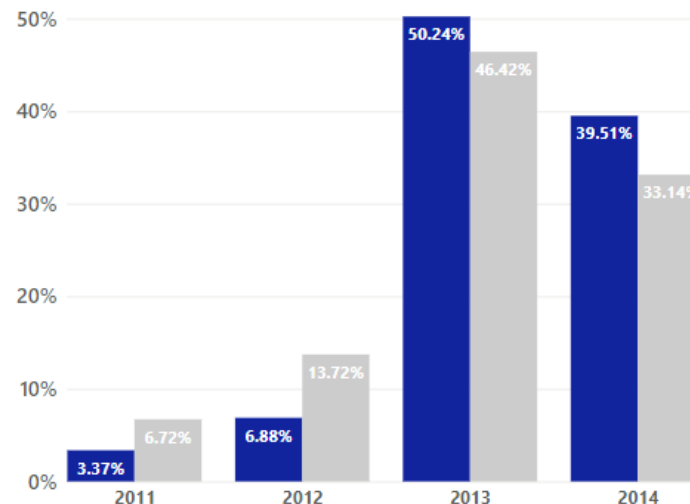


■ Volume of Sales %  
■ Volume of Customer %

### Professional



### Skilled Manual



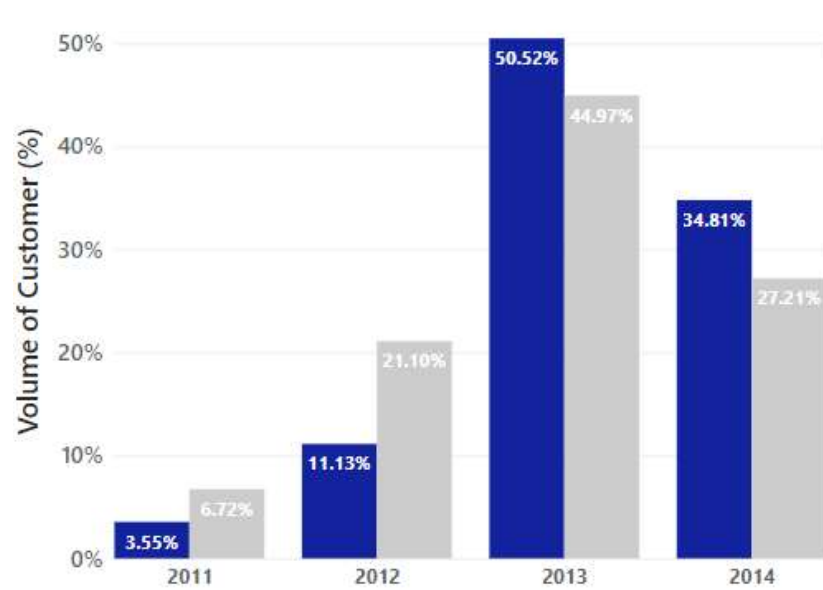
Comments

# Customer Demographics - Online

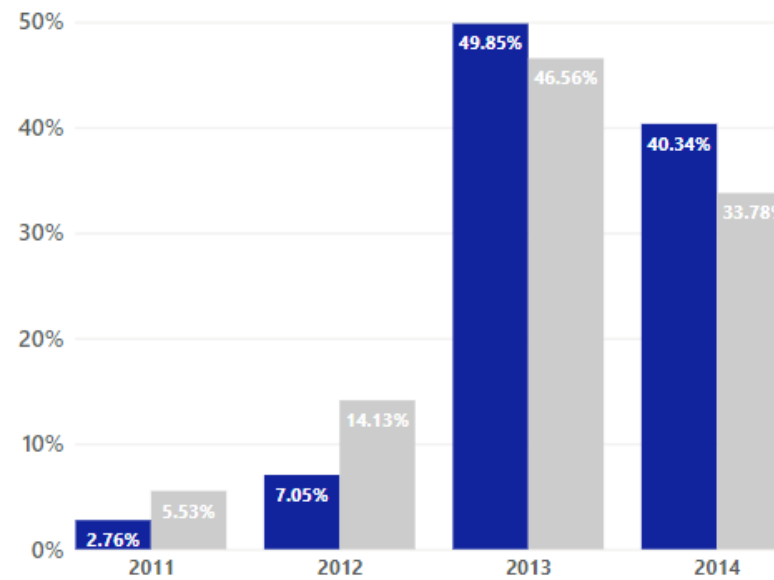


## Volume of Customer and Sales by Income

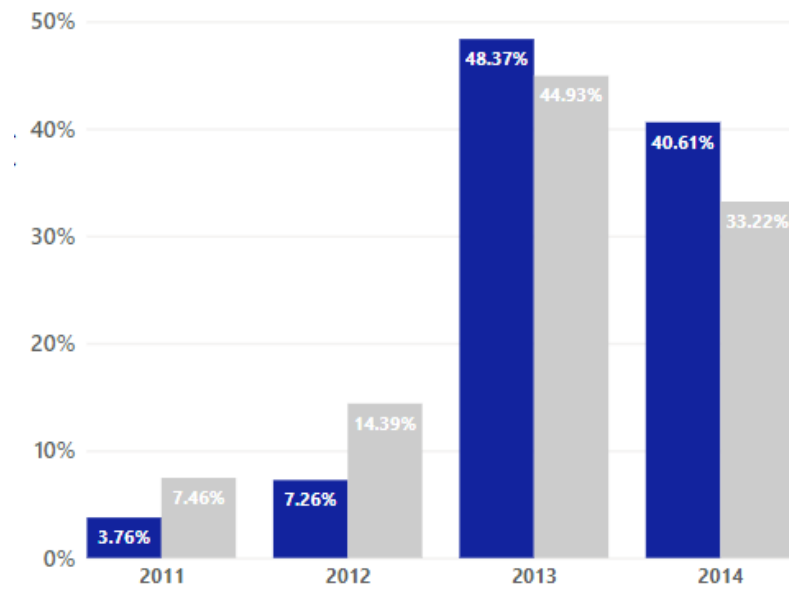
### High Income



### Low Income



### Mid-Income



■ Volume of Sales %

□ Volume of Customer %

# Which areas AHG should improve?

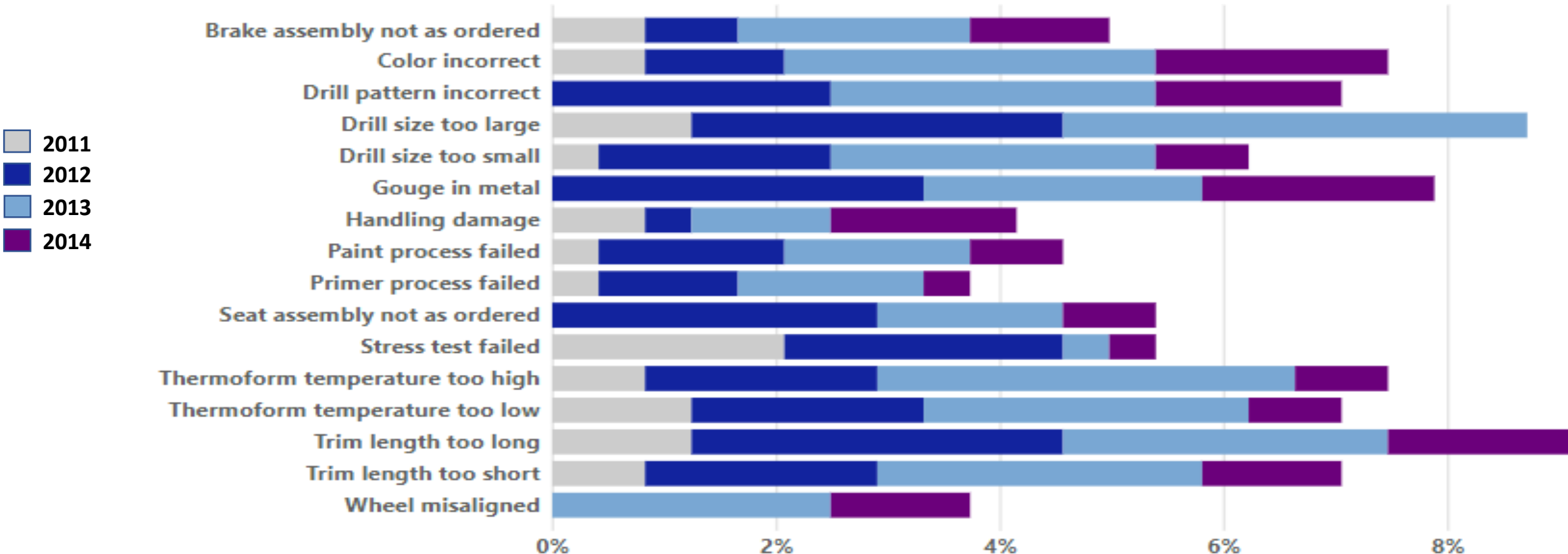


## Manufacturing

- Total Budget and actual Manufacturing cost remained on changed YoY. AHG should carry out an inquiry for possible skullduggery.
- Scrap Reason: “Drill size too large and Trim length too short” should be reviewed why it is above the average.
- Days Delay Delivery: 33 % of Work Orders are Late.

# Which areas AHG should improve? – Manufacturing

## % Work Order by Scrapping Reasons YoY



### Comments

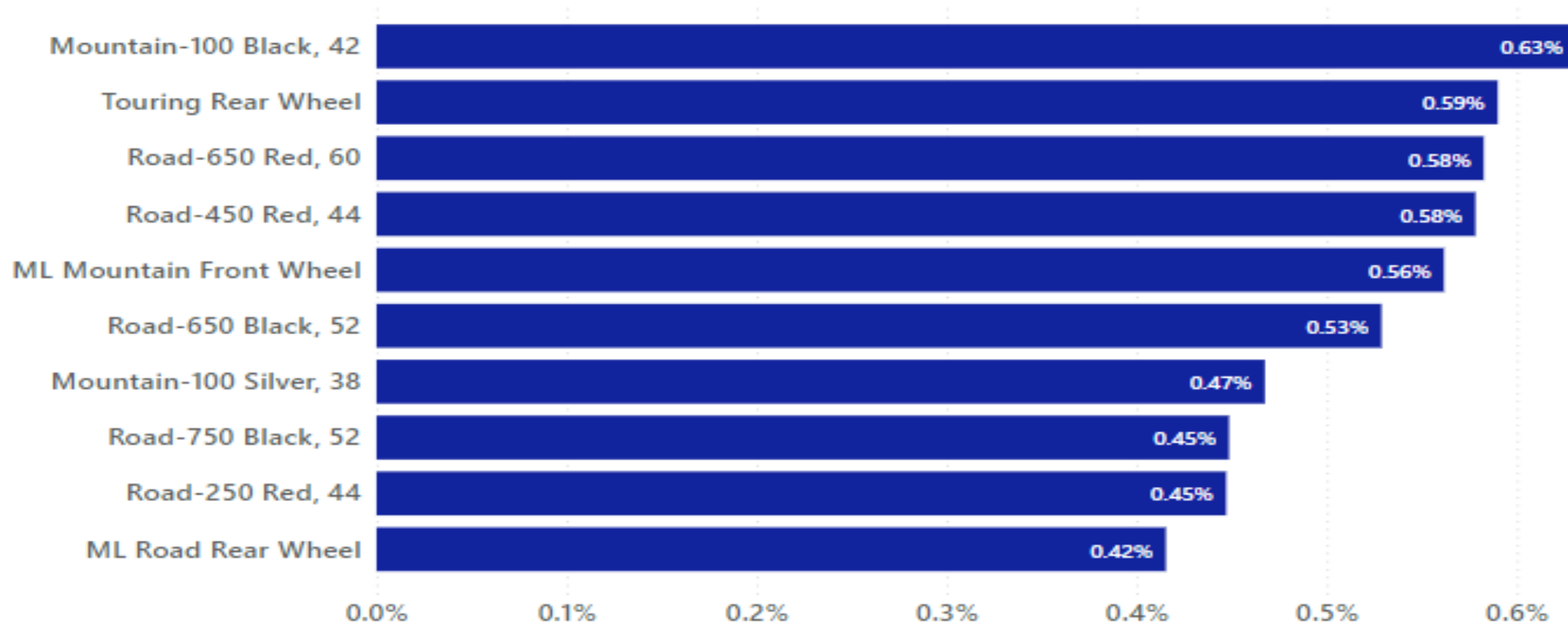
- Scrap Reason: Over the years the soaring high level of scrap demonstrates why a manufactured product may fail inspection and as a result impact of the company's manufacturing process.
- Trim length too short and drill size too large should be reviewed why it is more than the average.





## Which areas AHG should improve? – Manufacturing

### Top 10 Products with Higher % of Scrap



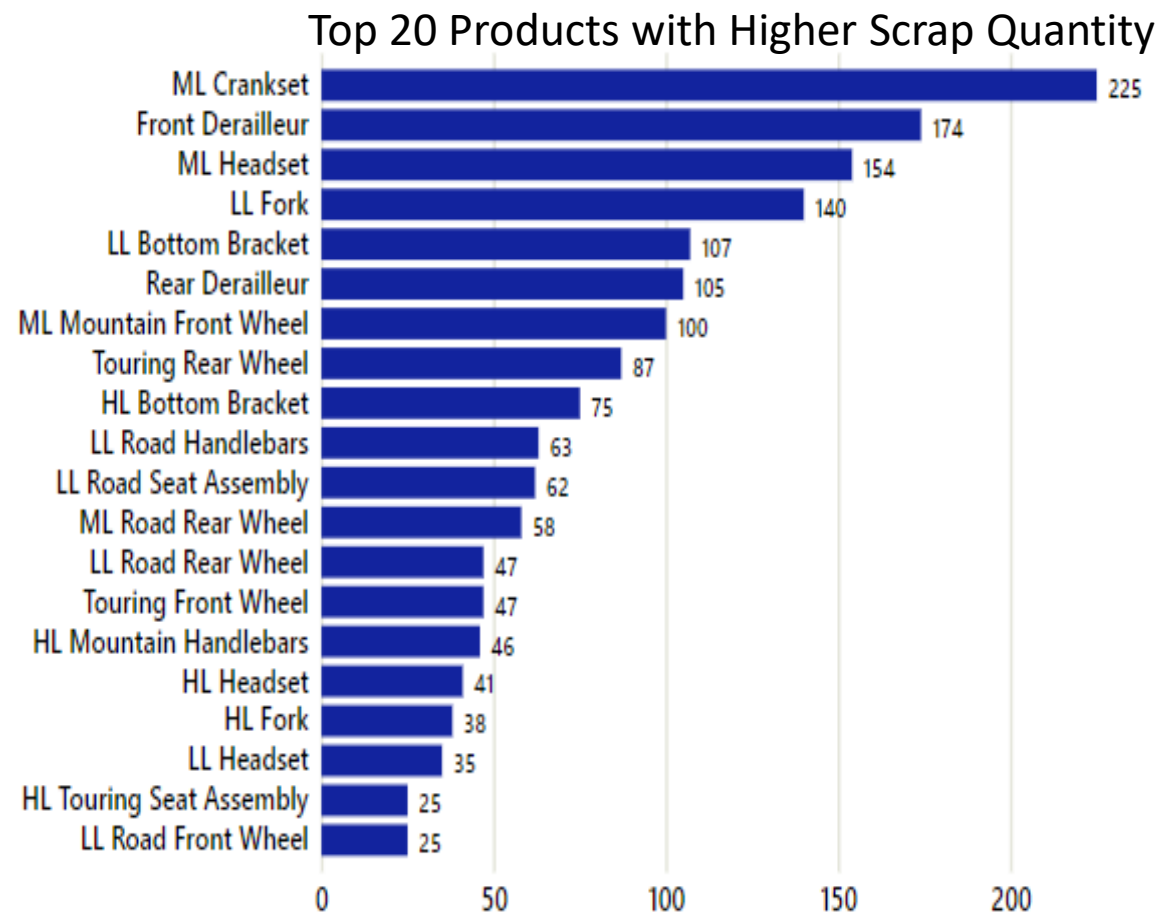
#### Comments:

This survey shows that some products like Mountain-100 Black 42 at 0.63%, had the highest total scrap quantity and was 51.96% higher than ML Road Rear Wheel which carries potential manufacturing risks and can cost high level of manufacturing process.

## Which areas AHG should improve? – Manufacturing

### Scrap Quantity with Scrap Reason

Scrap Reason	Scrap Quantity
Brake assembly not as ordered	143
Color incorrect	191
Drill pattern incorrect	147
Drill size too large	132
Drill size too small	37
Gouge in metal	130
Handling damage	130
Paint process failed	114
Primer process failed	52
Seat assembly not as ordered	127
Stress test failed	86
Thermoform temperature too high	198
Thermoform temperature too low	193
Trim length too long	244
Trim length too short	99
Wheel misaligned	95
Total	2118

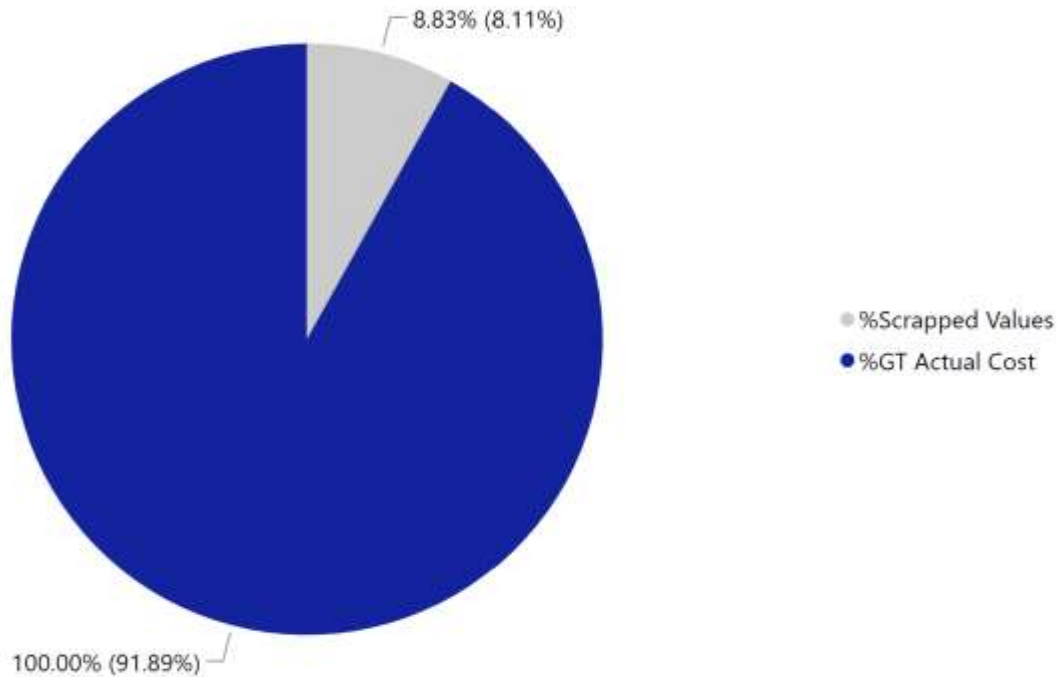


#### Comments:

- Highest scrap quantity report shows that ML Crankset accounted for 13.60% of the product with higher Scrap quantity.
- Trim too long has the highest scrap reason which should be reviewed.
- **NOTE:** 18% of scrap value has a significant manufacturing loss to AHG. This should be reviewed.

## Which areas AHG should improve? – Manufacturing

### % Loss of AHG Manufacturing cost to Scrap value



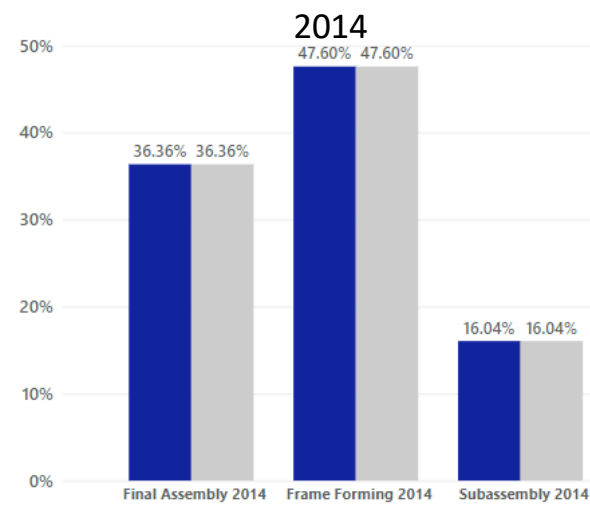
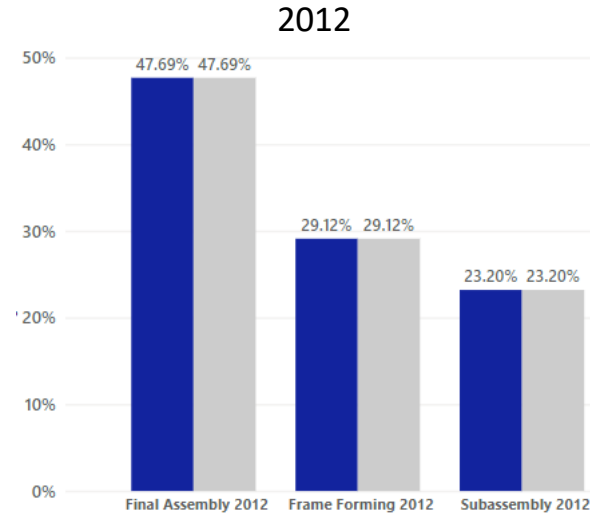
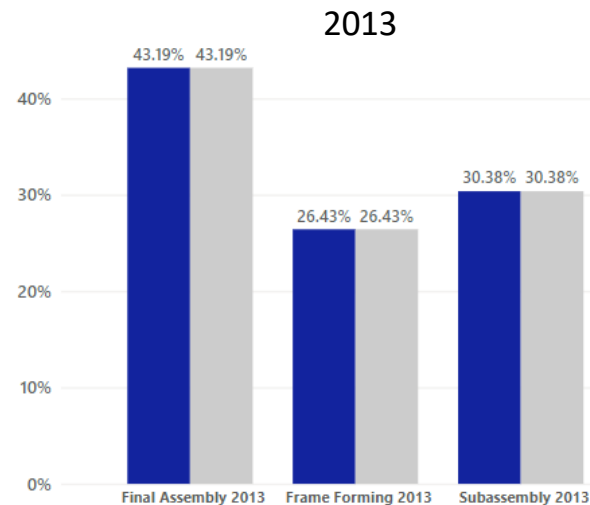
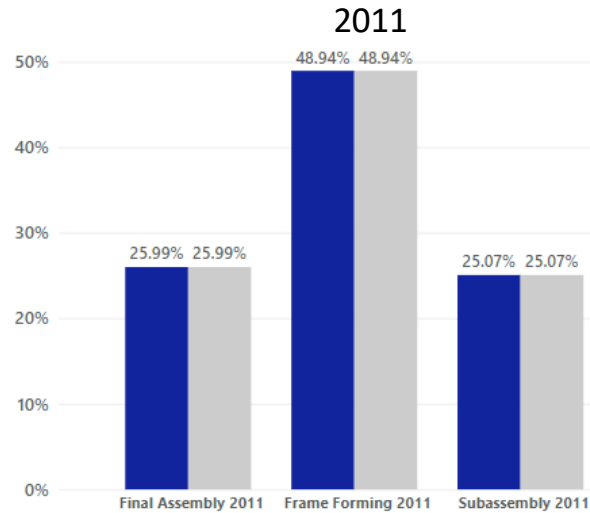
#### Comments

- 8% of scrap value has a significant manufacturing loss to AHG
- 
- NOTE: To fully minimize scrap and waste, processes must be streamlined from end to end, beginning with the initial sales contact through the final delivery of the order. Mistakes or inefficiencies at any phase can result in unnecessary waste. AHG should Robust process control measures for identifying the causes of defects, ensuring adherence to design specifications.

## Which areas AHG should improve? – Manufacturing



### Total Budget & Actual Cost by Manufacturing Process



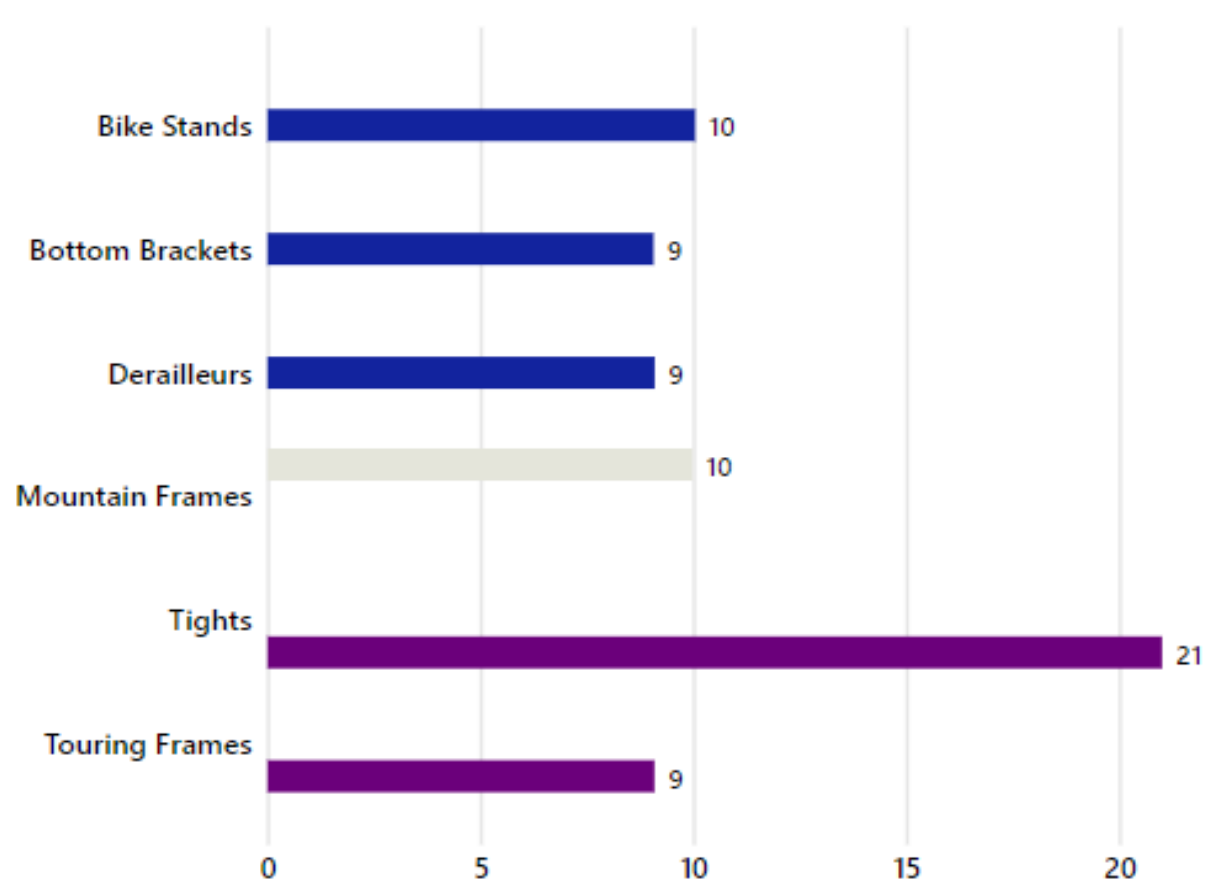
■ Total Budget  
■ Actual Cost

### Comments

- Total Budget and Actual Cost are positively correlated with each other across years.
- **NOTE:** AHG should audit the manufacturing process for likely manipulation of expenses or fraudulent disbursements.

## Which areas AHG should improve? – Manufacturing

### Average Time To Manufacture



#### Comments:

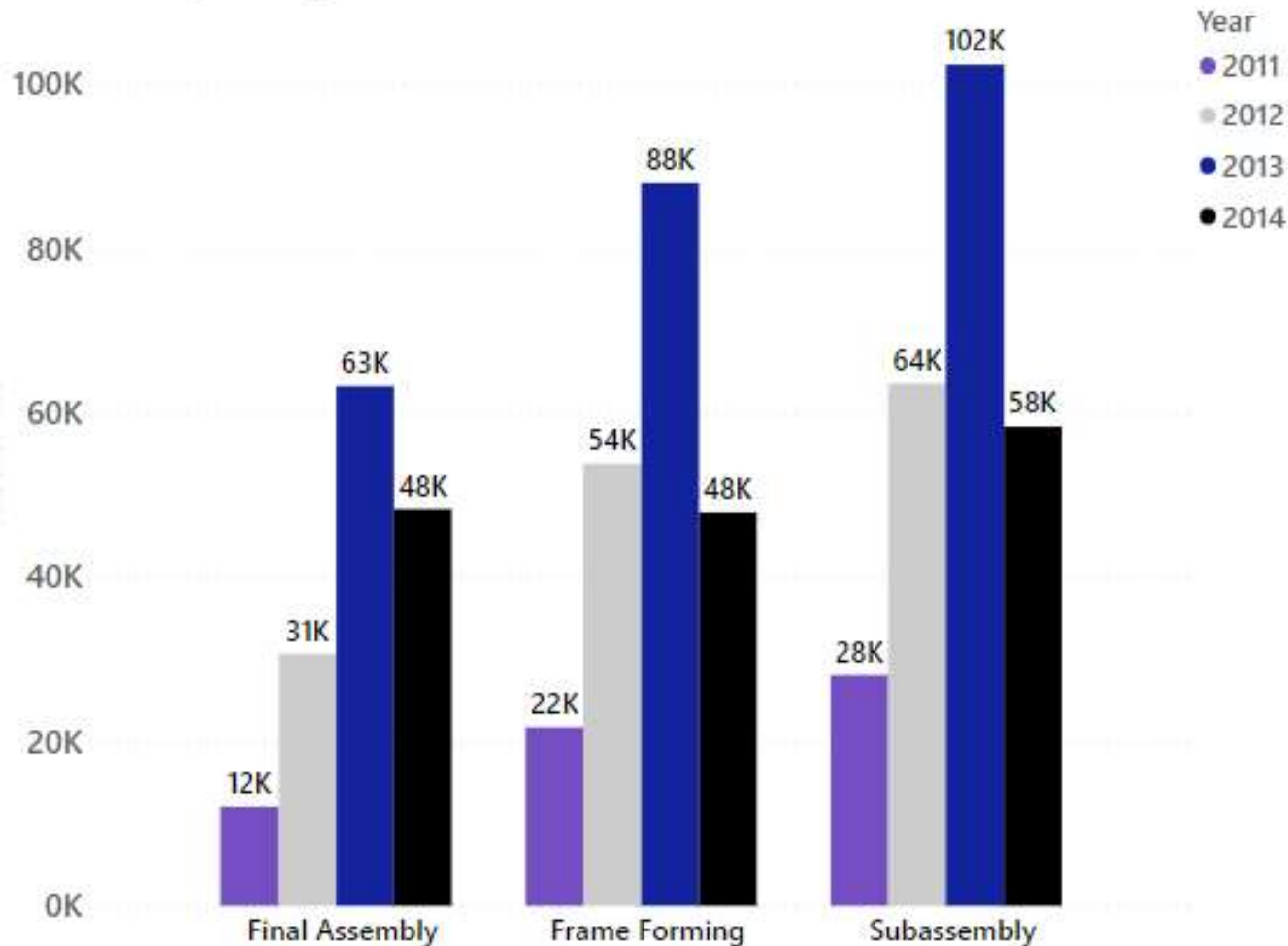
Giving that the average time to manufacture is **8 Days**, There are strict guidelines dictating the timeliness of certain packages. with Certain goods in high demand, which is why they may need to be manufactured and delivered within strict timeframes.

NOTE: AHG timely manufacturing processes make for high customer and client satisfaction. Not only will receiving their goods on time lend brand credibility and acquire new customer.



## Which areas AHG should improve? – Manufacturing

### Annual Cost by Manufacturing processes in each Location



#### Comments

- In 2013 AHG spent more in manufacturing locations YoY. Subassembly with 16.75% has the highest cost rate.
- **NOTE:** For labor-intensive products and those requiring significant assembly work, AHG should make production costs reasonable so profit can be sufficient, then the business will be able to operate without incurring unsustainable debt.



# Which areas AHG should improve? – Manufacturing

## AHG Price Discount



ProductSubcategory	Total List Price	Total Unit Price	Price Below ListPrice	%CT Discount
Touring Bikes	10,384,413.60	7,599,303.76	2,785,109.84	54.27%
Mountain Bikes	24,523,913.43	18,077,692.66	6,446,220.77	38.35%
Road Bikes	32,039,188.12	24,548,359.81	7,490,828.31	5.72%
Helmets	321,208.20	280,612.77	40,595.43	0.34%
Shorts	176,933.90	134,079.05	42,854.85	0.25%
Jerseys	370,810.09	289,240.33	81,569.76	0.22%
Vests	91,313.00	68,647.94	22,665.05	0.17%
Touring Frames	1,013,186.25	607,607.32	405,578.93	0.13%
Gloves	101,286.95	74,203.01	27,083.94	0.13%
Bike Racks	95,520.00	72,805.20	22,714.80	0.11%
Tights	73,265.23	43,843.65	29,421.58	0.06%
Mountain Frames	3,368,928.85	1,935,536.89	1,433,391.96	0.05%
Road Frames	2,762,385.75	1,578,907.31	1,183,478.44	0.04%
Wheels	404,819.86	242,962.08	161,857.78	0.03%
Hydration Packs	59,059.26	51,495.39	7,563.87	0.03%
Bib-Shorts	68,572.38	41,116.43	27,455.95	0.02%
Caps	30,404.18	25,933.96	4,470.22	0.01%
Socks	12,965.03	9,792.69	3,172.34	0.01%
Headsets	26,545.40	15,902.69	10,642.71	0.01%
Cranksets	126,760.77	76,040.26	50,720.51	0.01%
Cleaners	10,549.65	9,204.27	1,345.38	0.01%
Handlebars	118,979.95	68,478.52	50,501.43	0.00%
Bottles and Cages	59,013.75	58,118.64	895.11	0.00%
Derailleurs	41,124.63	24,667.46	16,457.17	0.00%
Pedals	94,455.13	56,666.60	37,788.53	0.00%
Brakes	40,363.50	24,211.71	16,151.79	0.00%
Forks	39,152.59	23,486.96	15,665.63	0.00%
<b>Total</b>	<b>76,875,359.33</b>	<b>56,423,747.61</b>	<b>20,451,611.72</b>	<b>100.00%</b>

### Comment:

Price Below List Price: The bike category recorded the most significant price deduction in the reseller market compared to other products.

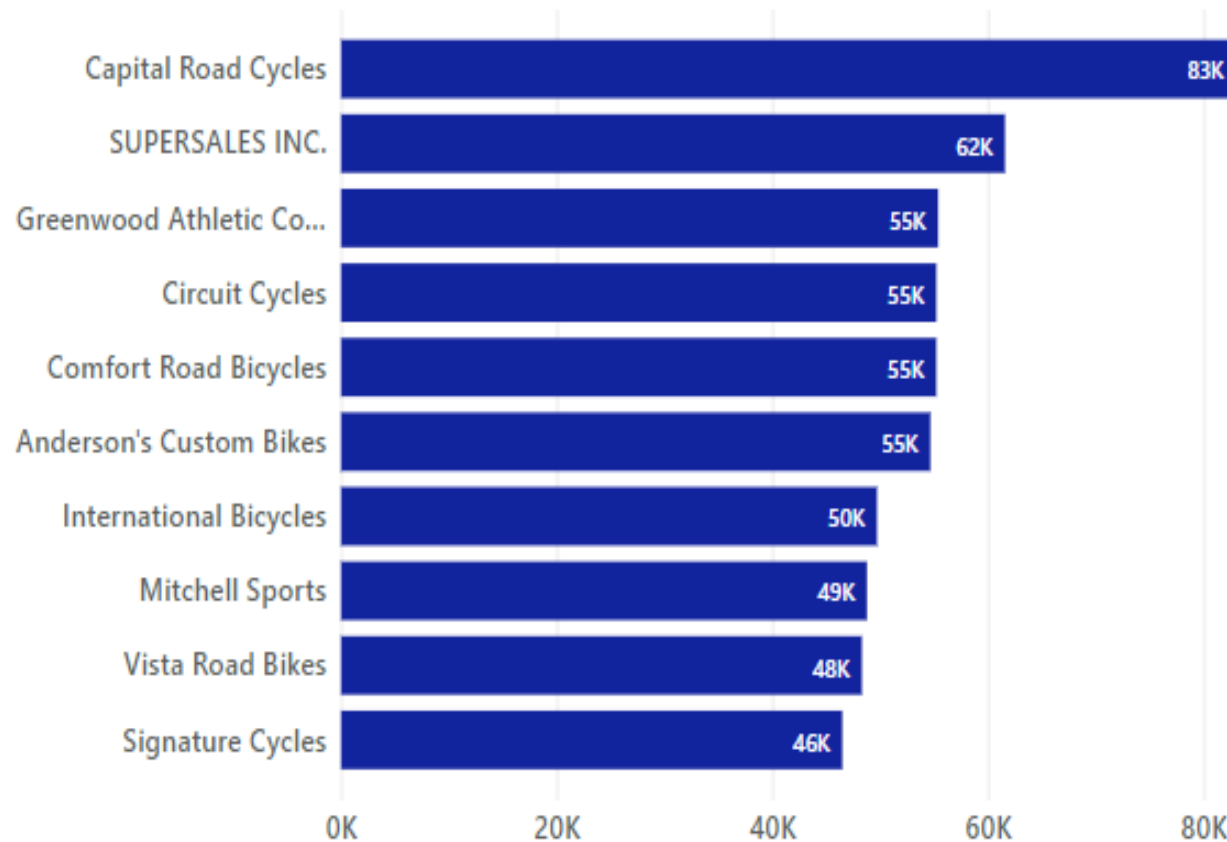
Discount: The margins are higher when selling Touring bikes, Mountain bikes, and road bike and other products at full price, compared to selling at a discount.

**NOTE:** It's reasonable for customers to expect the best deal possible, but discounting creates a variety of problems for AHG. Ultimately, these problems can impact profit margin, customer satisfaction, and reputation so severely they may threaten AHG's business.

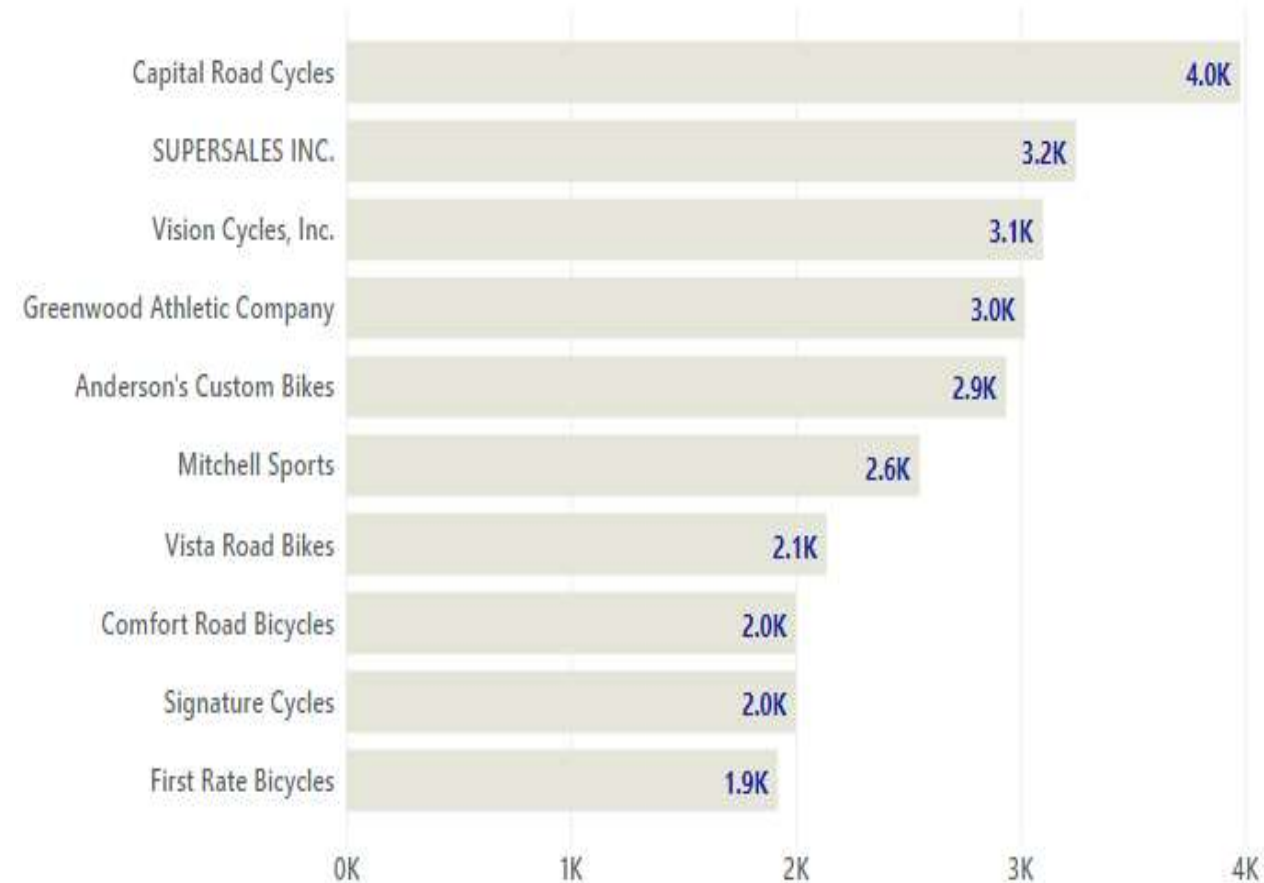
# Which areas AHG should improve? – Supply Chain



Top 10 Vendors with High RECEIVED Manufacturing ITEMS



Top 10 Vendors with High REJECTED Manufacturing Items



## Comments:

At 83,002, Capital Road Cycles had the highest received quantity and was 78.58% higher than Signature Cycles, which had the lowest received quantity at 46,480.

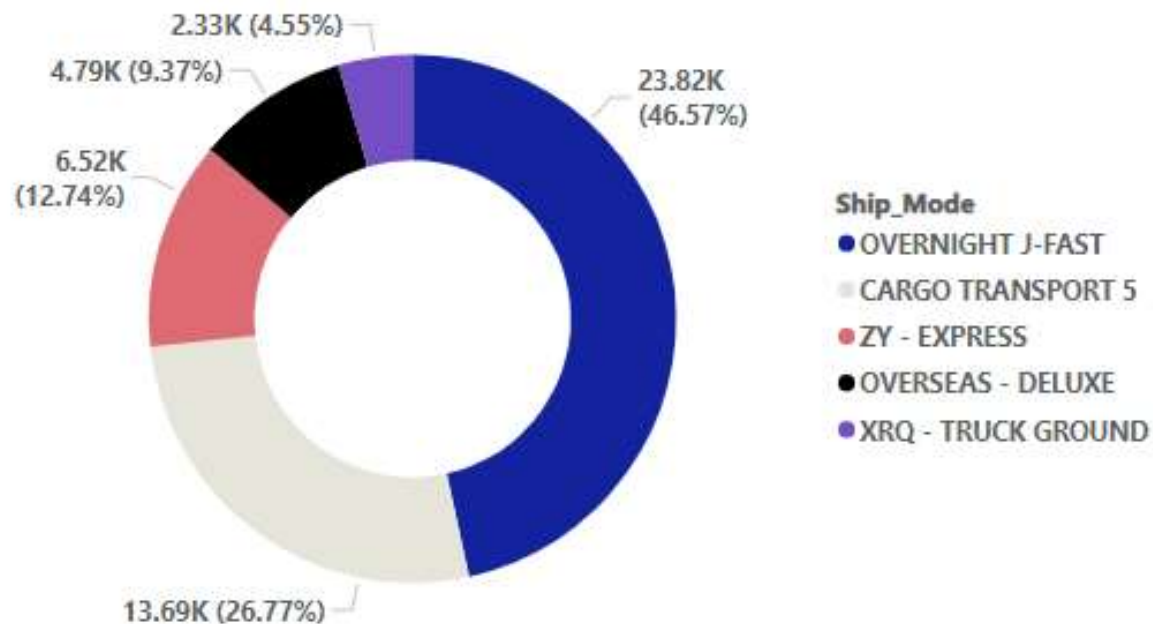
Capital Road Cycles accounted for 14.87% of Total received quantity

**NOTE:** AHG should continue to patronize vendors with high received quantity.

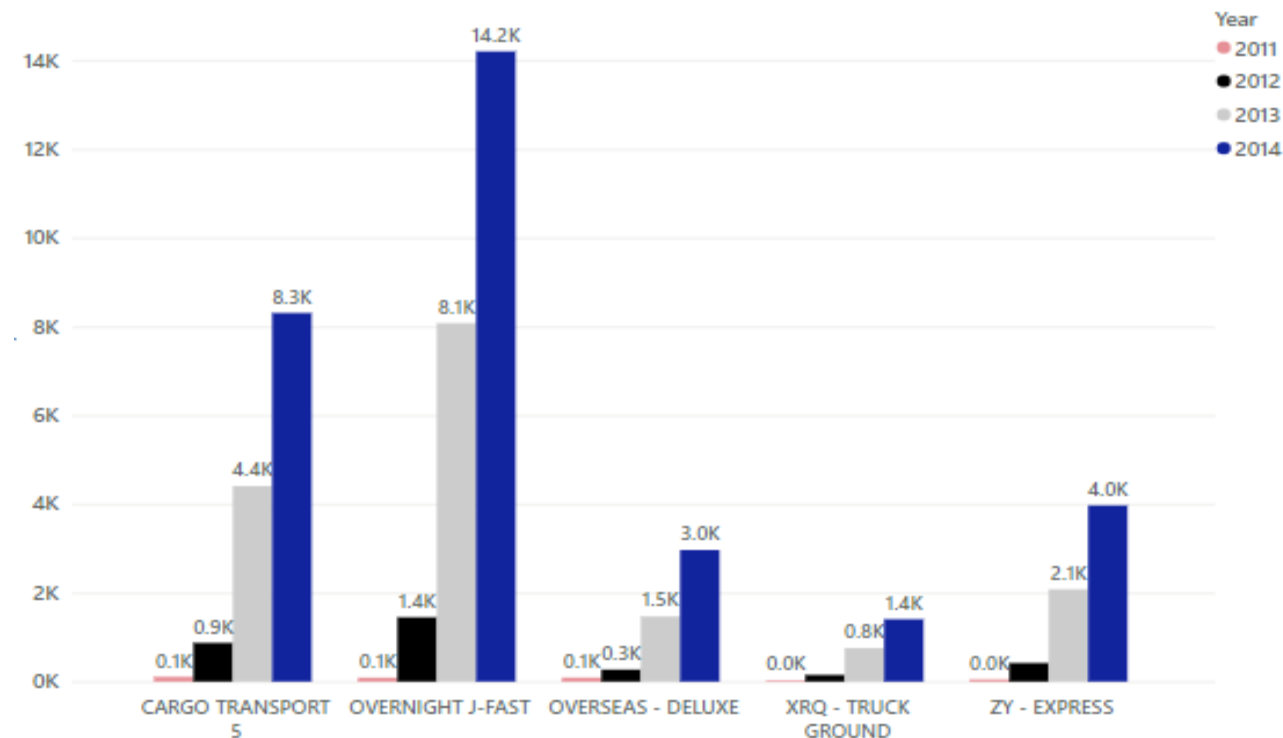
# Which areas AHG should improve? – Supply Chain



## Transportation Cost by Ship Method



## Transportation Cost YoY



### Comments

**Transportation Cost :** At 23,815.75, OVERNIGHT J-FAST had the highest Ship rate and was 923.65% higher than XRQ – Truck Ground, which had the lowest Total Ship Base at 2,326.55

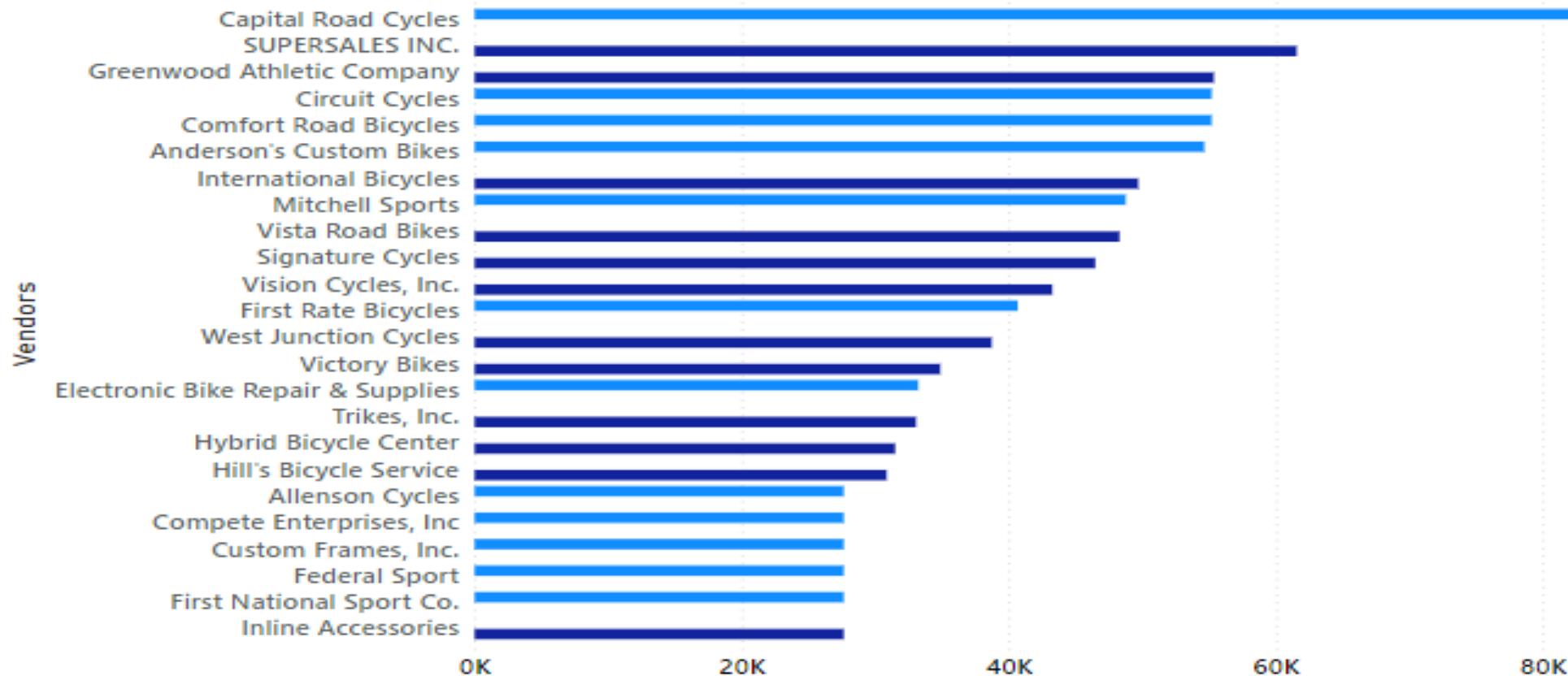
**NOTE:** AHG should consider carrying out consolidated freight shipment, negotiate and build a better relationship with other carries so they can obtain discounts and reduce cost.

## Which areas AHG should improve? – Supply Chain



### Vendors Delivery Status of Manufacturing Items to AHG

Delivery Status ● Early Delivery ● Late Delivery



#### Comments:

- Late Delivery and Early Delivery diverged the most when the Vendor was Jeff's Sporting Goods, when Late Delivery were 7,850 higher than Early Delivery.
- AHG should reconsider doing business with vendors with late delivery status.

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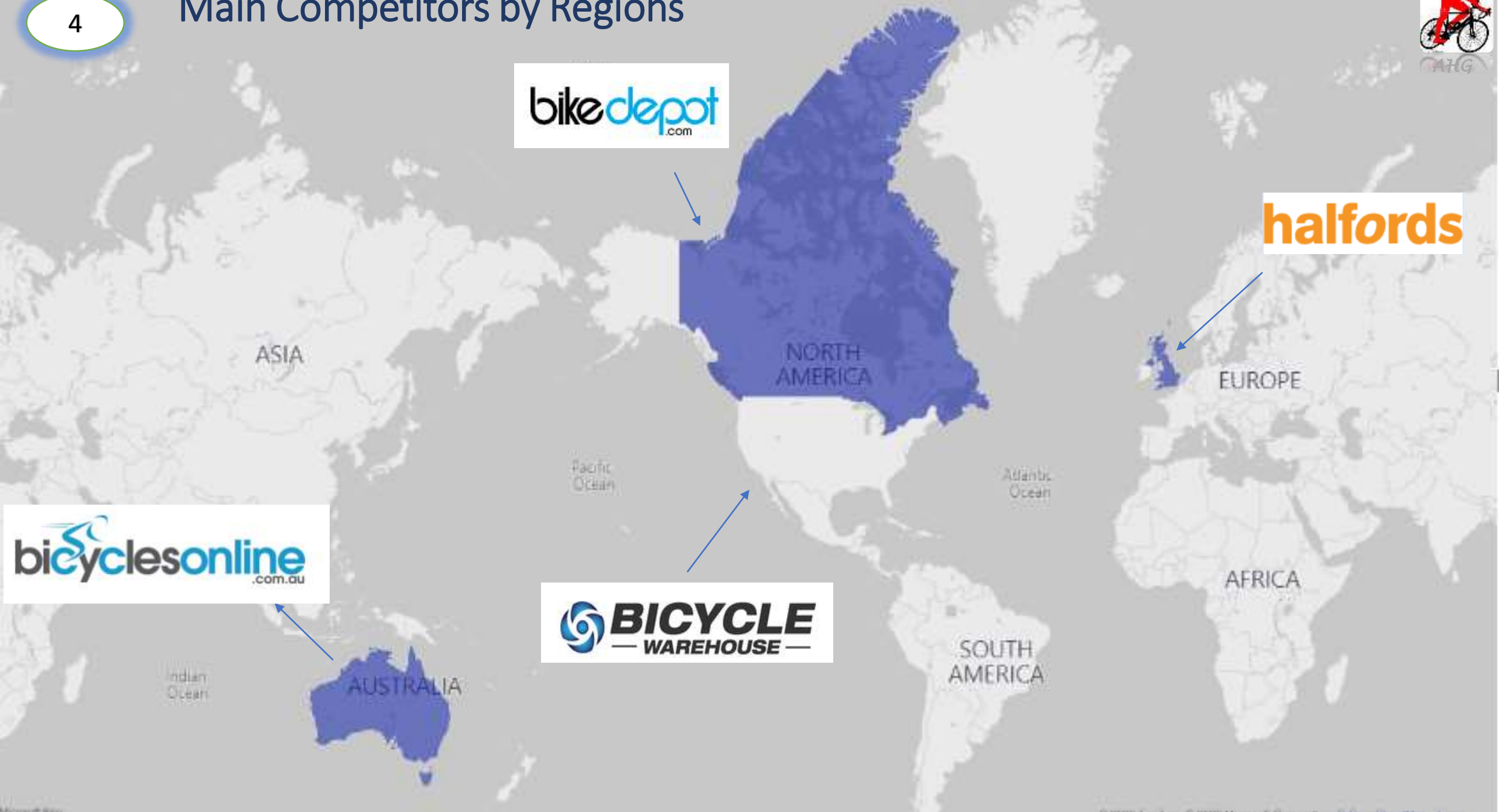
## 4 Market Share & Competitors







ATG

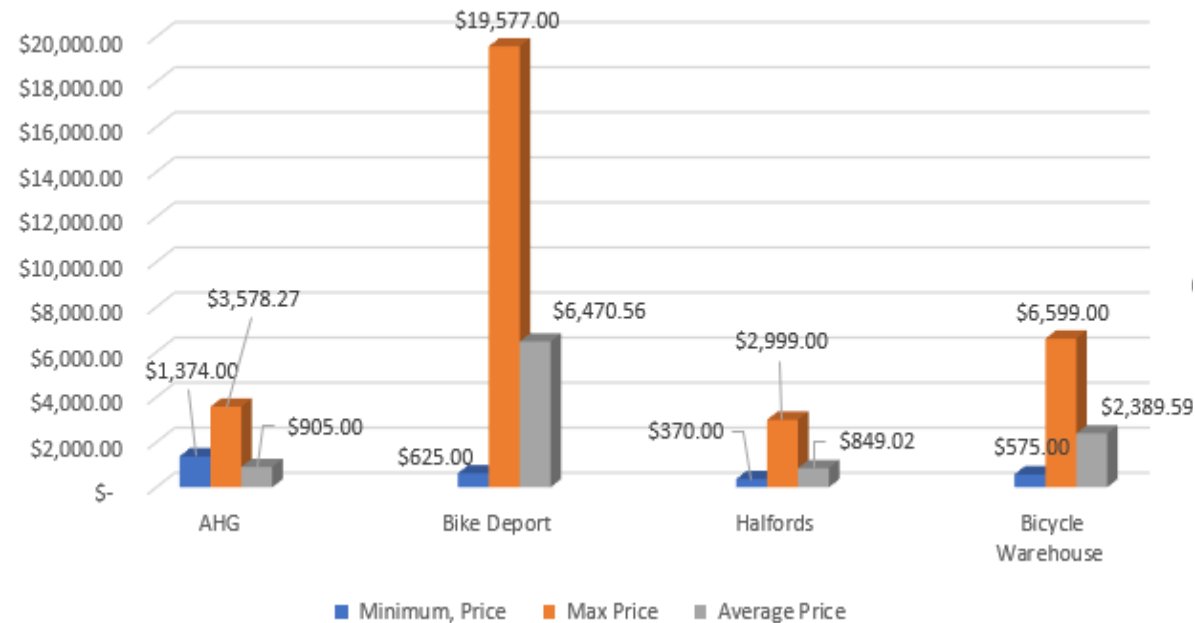




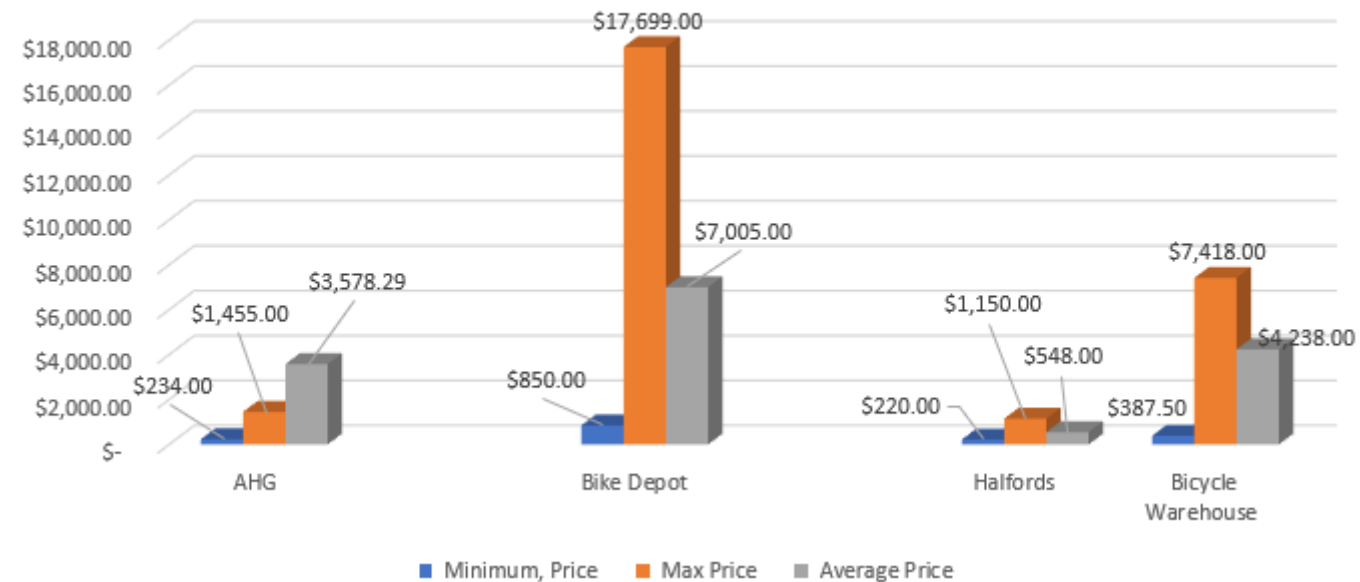


## Price Competitor Analysis Online – Mountain and Road Bikes in \$

Global Mountain Bikes



Global Road Bikes

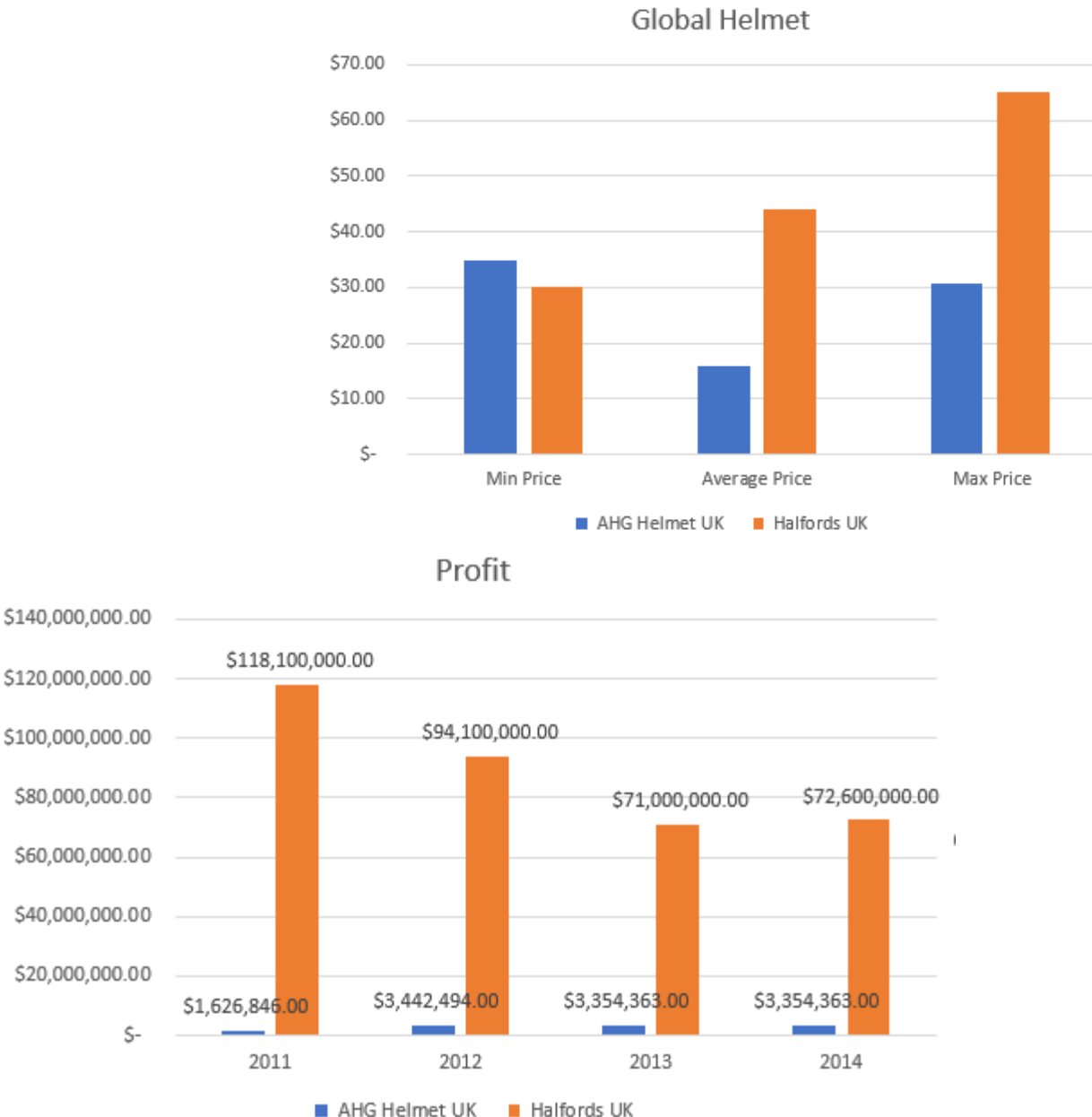
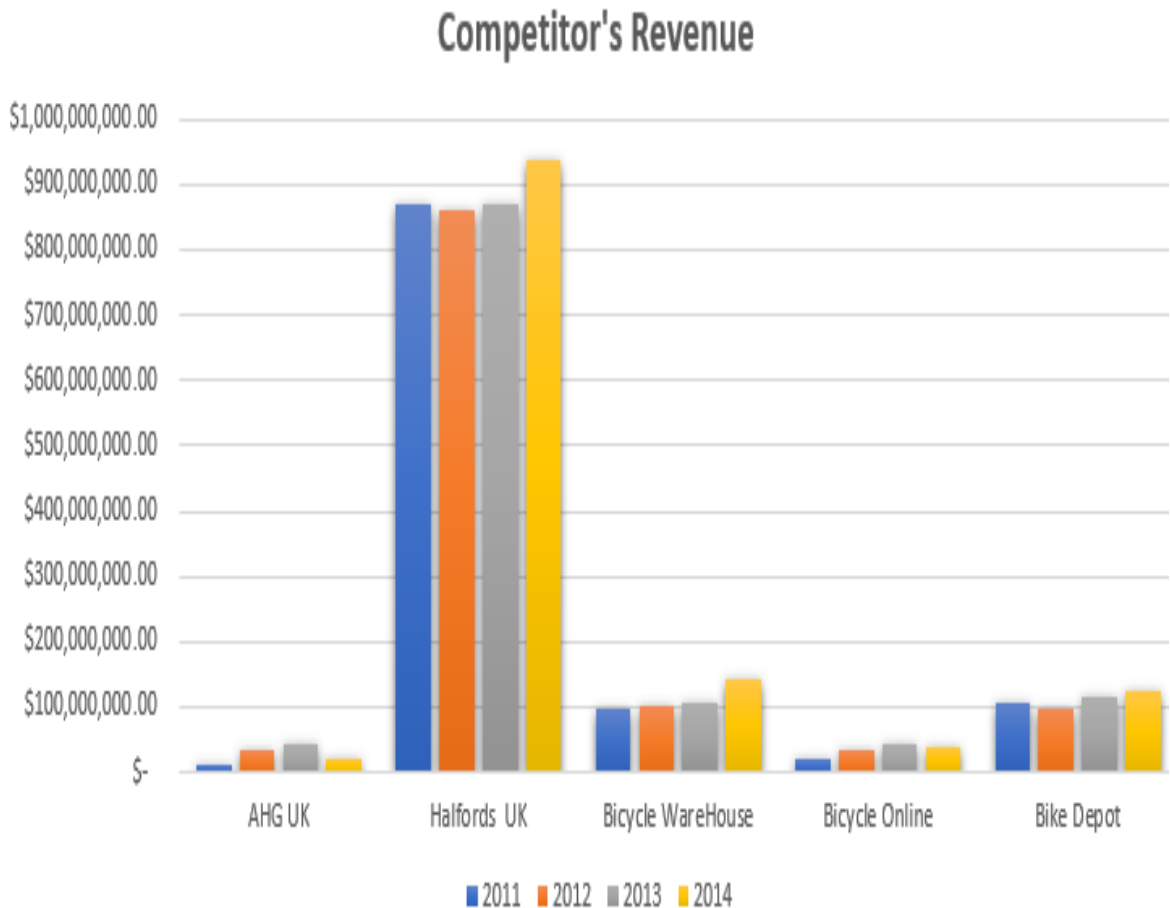


AHG's prices are compared to others are rationally competitive apart

# Market Share & Competitors - Online



## Price Competitor Analysis Online – Revenue, Profit & Helmet



# Market Share & Competitors

## Competitors Analysis by Notable Features – AHG does not have



### Notable Features



- Late Delivery
- Aging Infrastructure
- Value for Money
- Excellent Customer Service
- Lack of Geographical Diversification
- Negative Publicity
- Product Review
- Full Warranty
- Easy Returns
- Gift Cards & Discount
- Product Diversity
- Superior Products
- Online Sales
- Price Discount Offerings
- Distribution Services
- Post-Sale Customer Service System





## Bikes Category by Company

Company	Mountain Bikes	Road Bikes	Kids Bikes	Touring Bikes	BMX	Path & Pavement	City bikes	E- Bikes	Track Bikes
AHG Global	●	●		●					
Cannondale	●	●	●	●	●	●	●	●	●
Bicycle Online	●	●	●		●			●	
Bicycle Warehouse	●	●	●		●	●			
Bike Depot	●	●	●		●			●	
Halfords	●	●	●	●	●				●

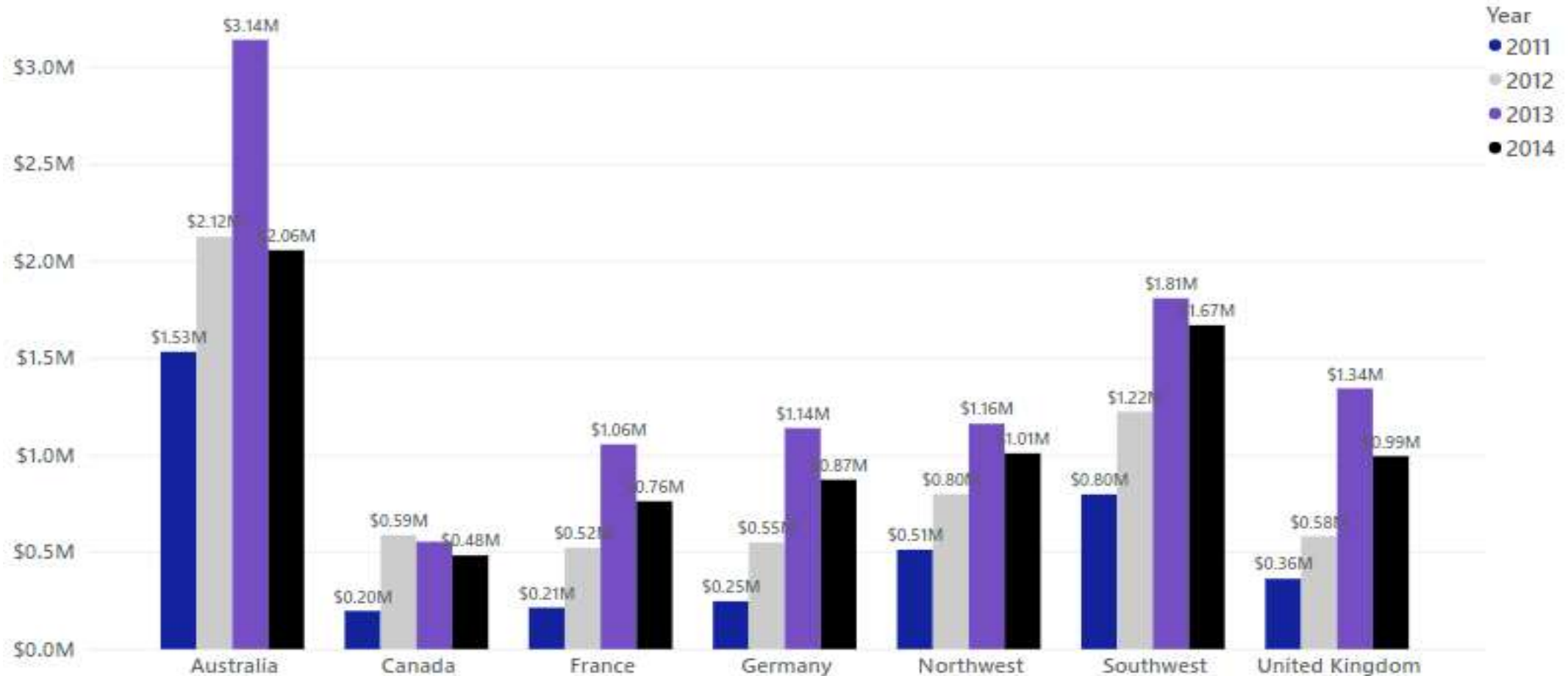
### Comments

- Electronics bike is presented in all competitors. According to Grand View research ; By first quarter of 2017, hybrid bicycles are predicted to be the leading segment of global market and it is expected to account for over 14.2% share of the market in terms of value, accompanied by road and mountain segments. The hybrid bike is expected to reach valuation of US\$ 28.75 Billion by 2025.
- **NOTE: Regions such as Europe and Asia are picking up where bicycles have dedicated lanes in cities and suburbs and witnessing a shift in customer motive for buying E-Bikes from leisure to daily use.**

# Market Share And Competitors - Online



## AHG and Bike Sales by Region 2011 – 2015 (\$)



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## Market Basket Analysis



Products that are frequently purchased together:



Mountain Tube

Transactions that include Mountain Tire Tube>

- 32% Mountain Tires
- 18 % Fender Set
- 19% Water Bottle Cage and Water Bottles



Mountain Bikes

Transactions that include Mountain bike>

- 32% Cycling Cap
- 18 % Mini Bag
- 12% Water Bottle Cage



Products that are frequently purchased together:



Transactions that includes Mountain Tire Tube>

- 22% Gloves
- 12 % short sleeve Logo jersey



Transactions that includes Helmet

- Long sleeve jersey 31%
- Full Gloves 12%

Recommended joint purchases with joint profitability:



Transactions that includes Mountain Bike>

- 9% Socks
- 12 % Water Bottles cage



Transactions that includes Road Bike>

- 21% Fender Set
- 18 % Patch Kit



Recommended joint purchases with joint profitability:



Hydration Pack

Transactions that include Hydration Pack>

- 32% Bike Wash
- 18 % Classic Vest
- 12% Hitch Rack



Women Mountain short

The transaction that includes Woman Mountain >

- 9%Short- Mountain 400
- 15% Short sleeve classic
- 17% Half Finger Gloves & Racing Socks

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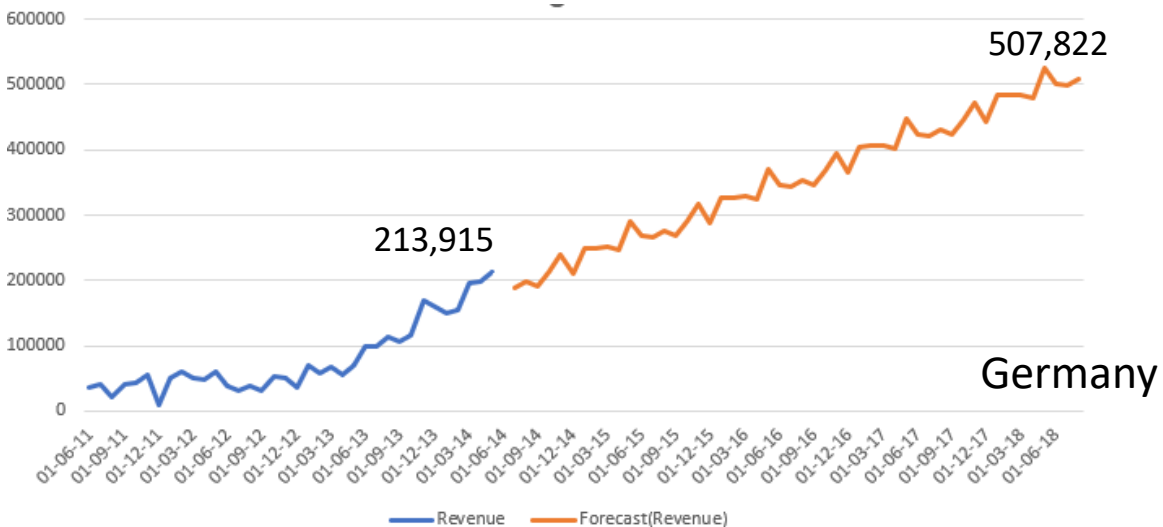
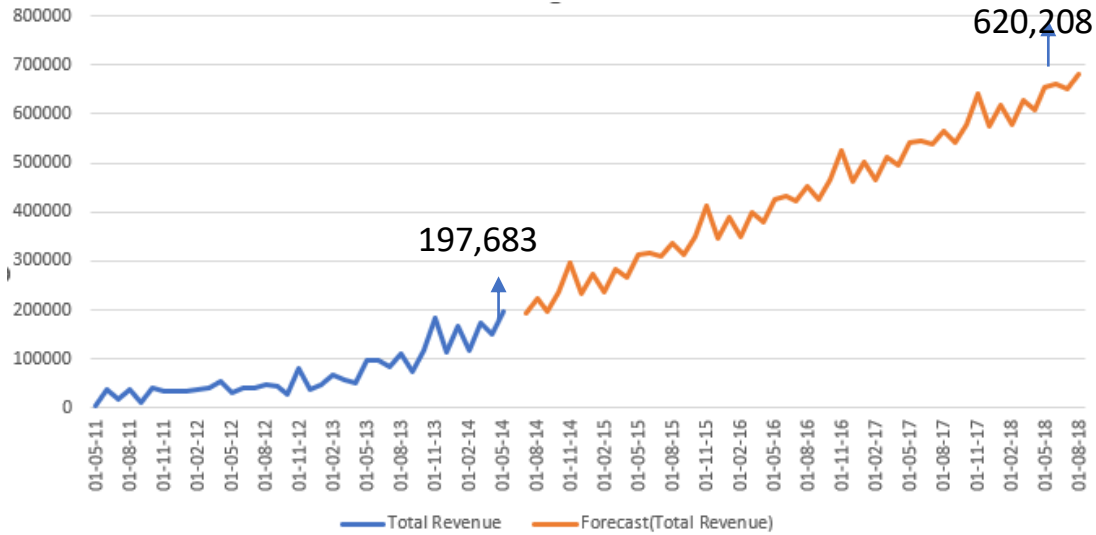
**5 Years Sales Forecast**



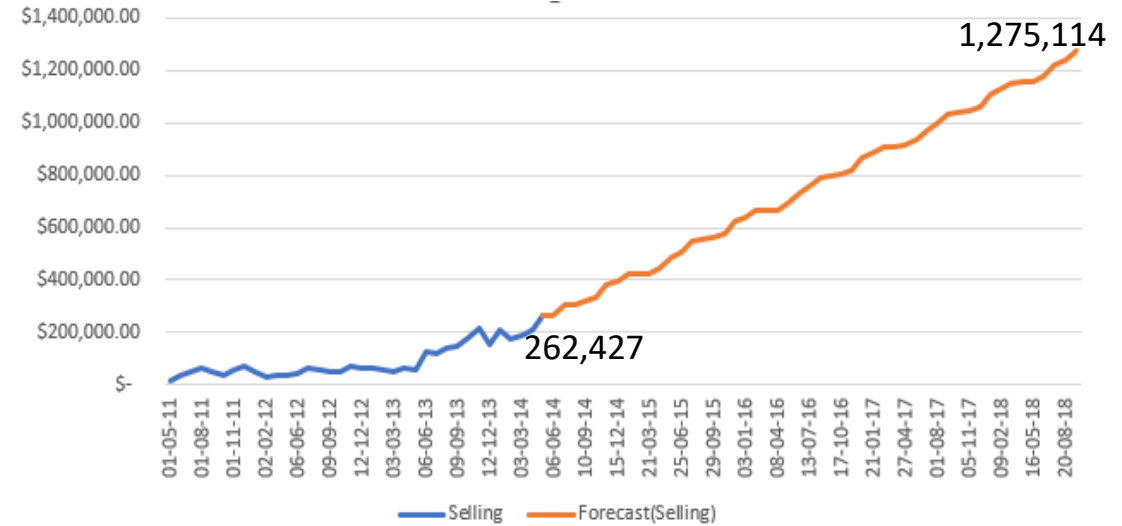
# 5 YEARS SALES FORECAST



## France Online



## UK Online



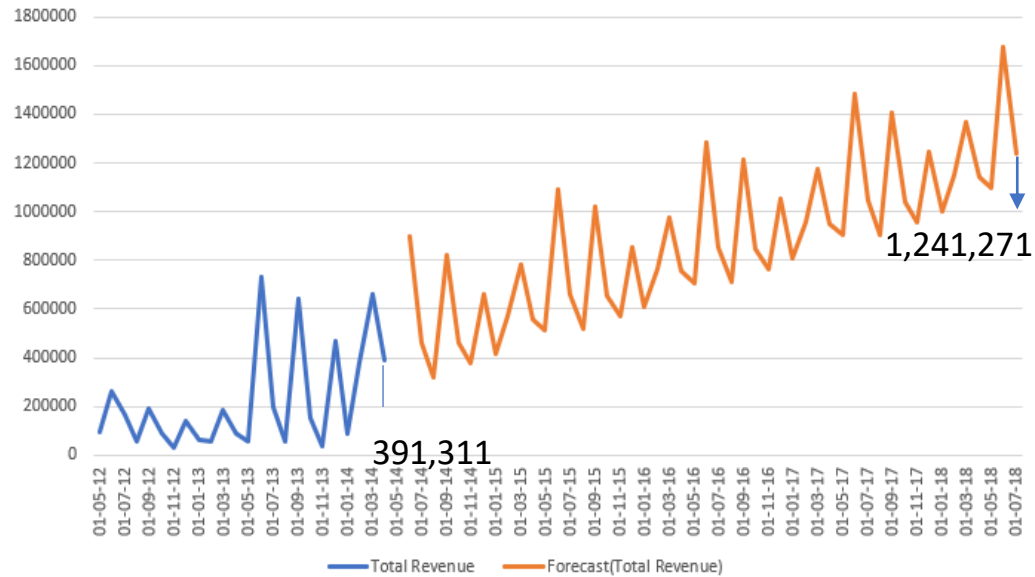
## Comments

- The Highest Quarterly sales was experienced in 1Q 2014, 262k in the UK, 197k in France.
- The sales forecast in 5 years the UK, Germany and France shows significant increase of 136%. 127% and 140 respective in revenue.

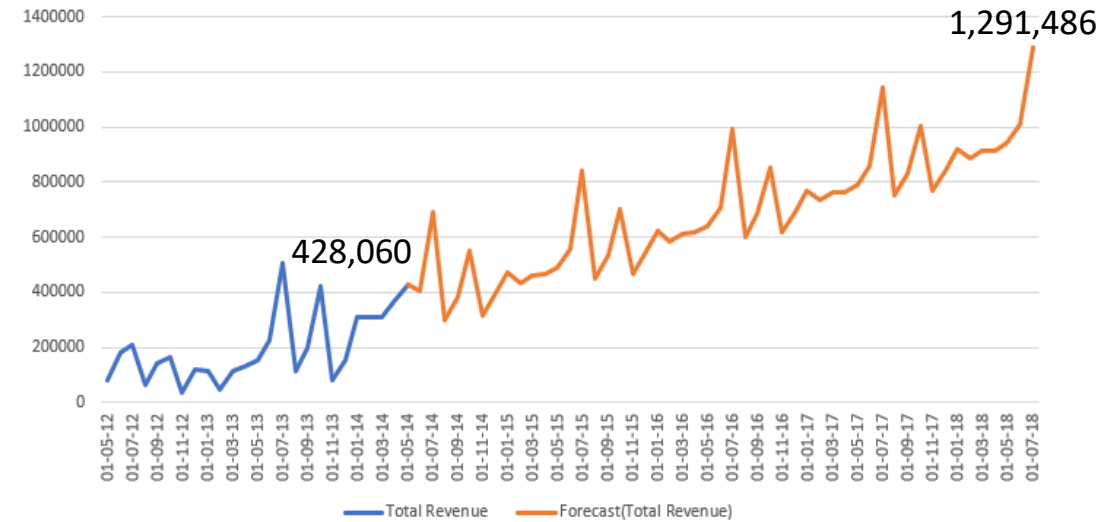
# 5 YEARS SALES FORECAST



## France Reseller Sales



## United Kingdom Reseller



## Comments

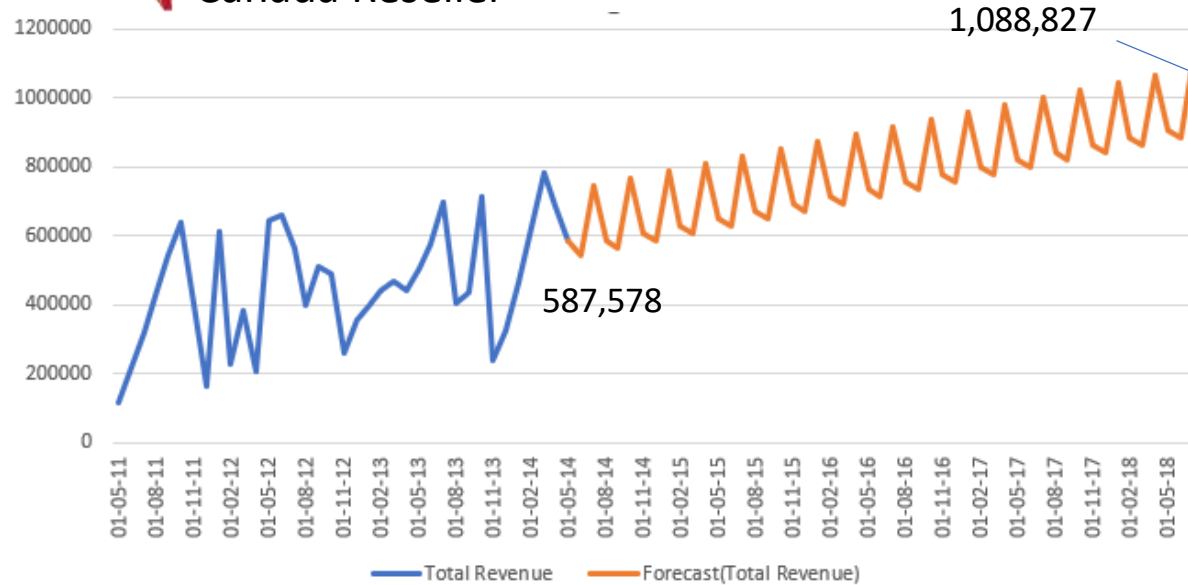
- The highest Quarterly sales was in Q3 2013, where sales revenue \$391k in France, \$428k in UK
- France & UK began sales in the 2Q 2012.
- Germany sales began in the 2Q 2013 so in this case Forecast can not be estimate. However, Germany sales was 20% higher than UK and France in the 2Q of live.
- The 5 Years Forecast of the UK and France shows an increment of 114% and 46% respectively in revenues.



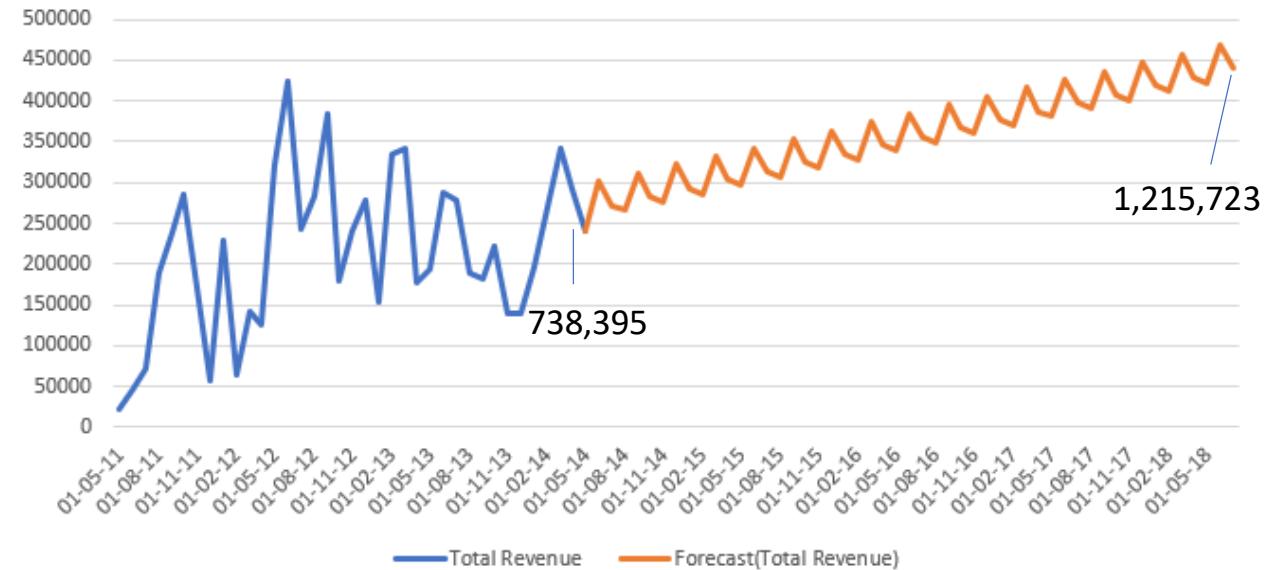
# 5 YEARS SALES FORECAST



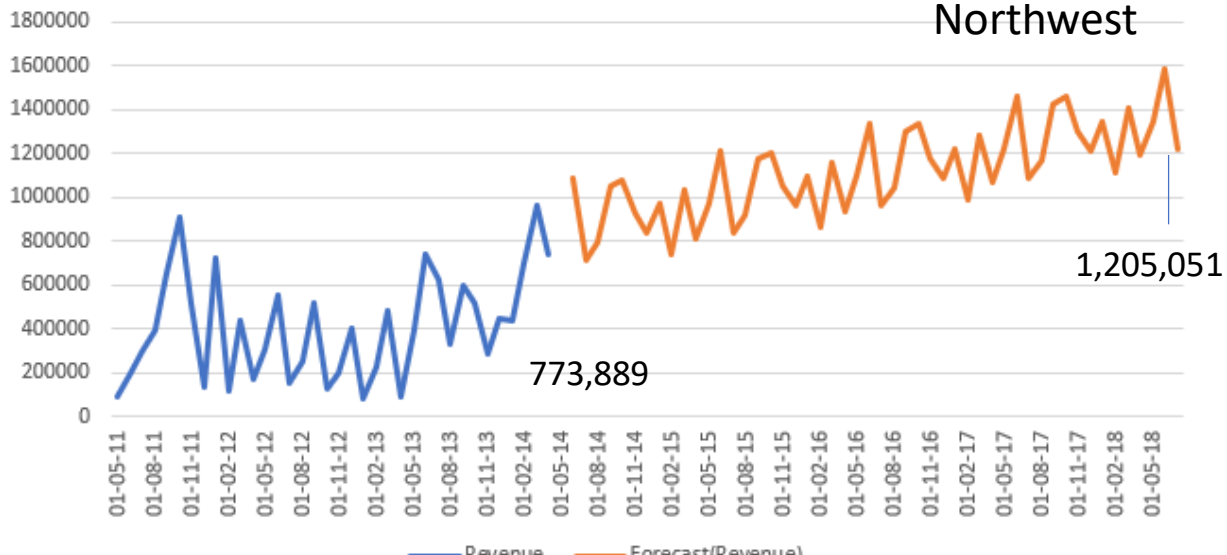
Canada Reseller



North-East



Northwest

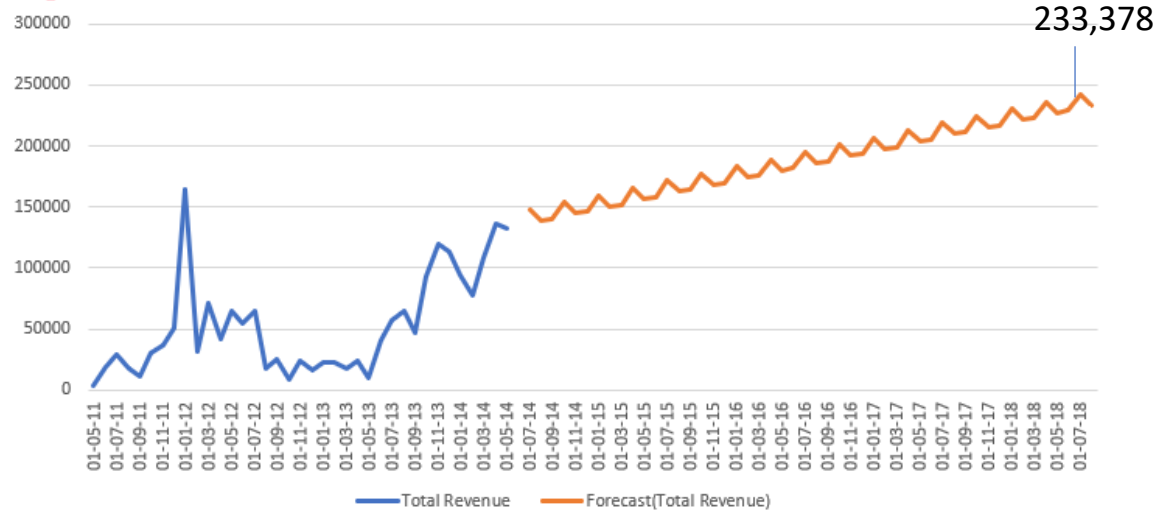


- The highest quarterly sales in Northeast US was in the 3Q 2012, where sales revenue were \$773k. And The highest quarterly sales in Northwest US and Canada was in the 3Q 2013, where sales revenue were 1,088k\$ and \$738k.
- In 5 Years Forecast of the NE US, NW US and Canada shows an increment of 51%, 41% and 129% respectively in revenues.

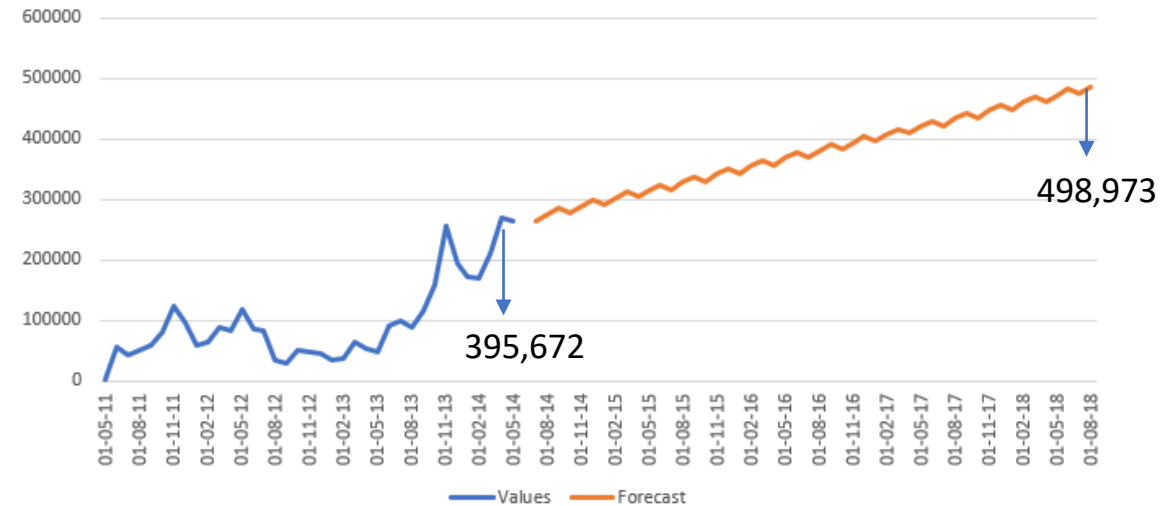
# 5 YEARS SALES FORECAST



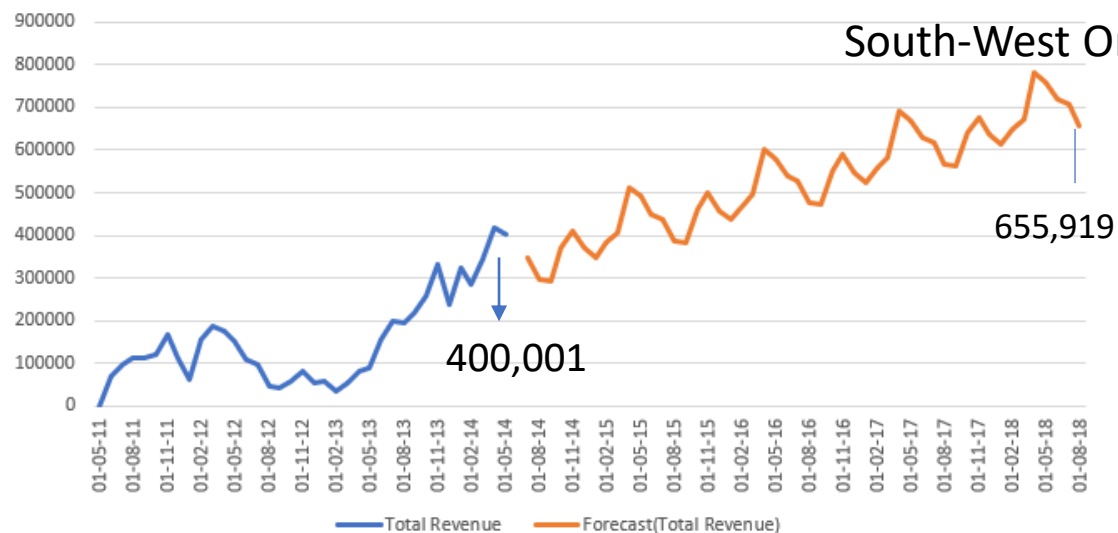
## Canada Online



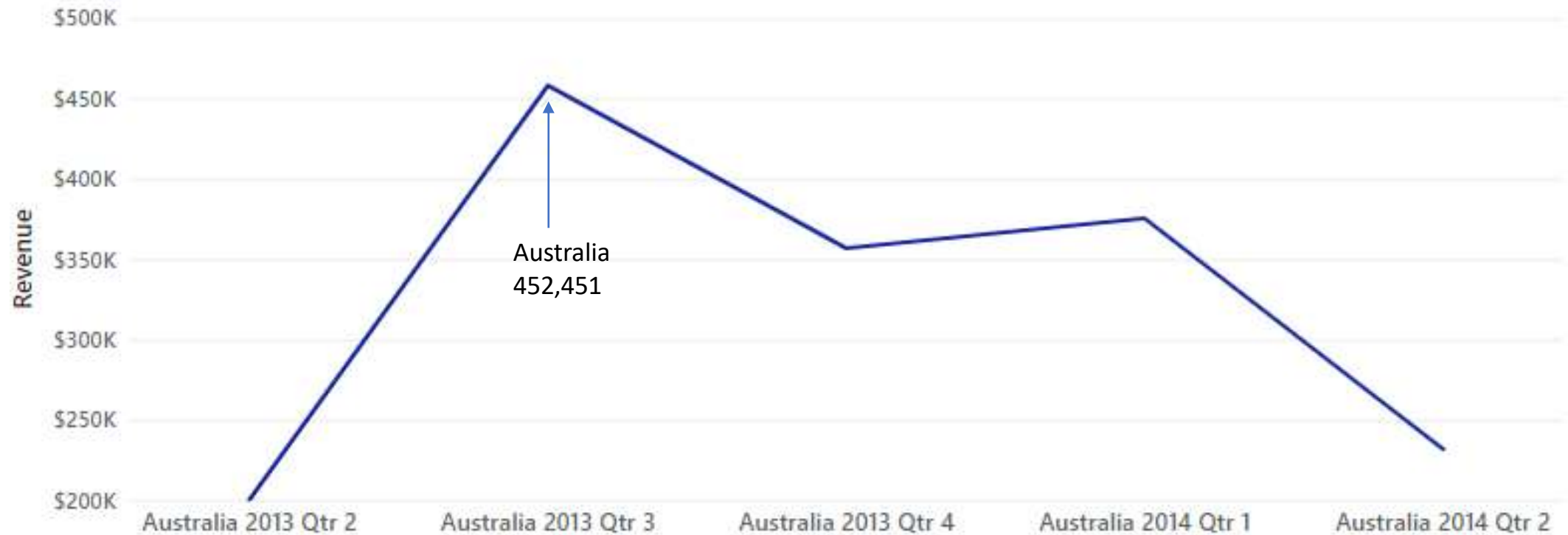
## North-West Online



## South-West Online



- The highest quarterly sales in Southwest US was in the 3Q 2012, where sales revenue were \$400k. And The highest quarterly sales in Southeast US and Central was in the 1Q 2012, where sales revenue were \$498k and 849k€.
- In 5 Years Forecast of the SW US and Central shows an increment of 99% and 97% respectively in revenues. However, SE US shows a decrement of 45% in revenue.

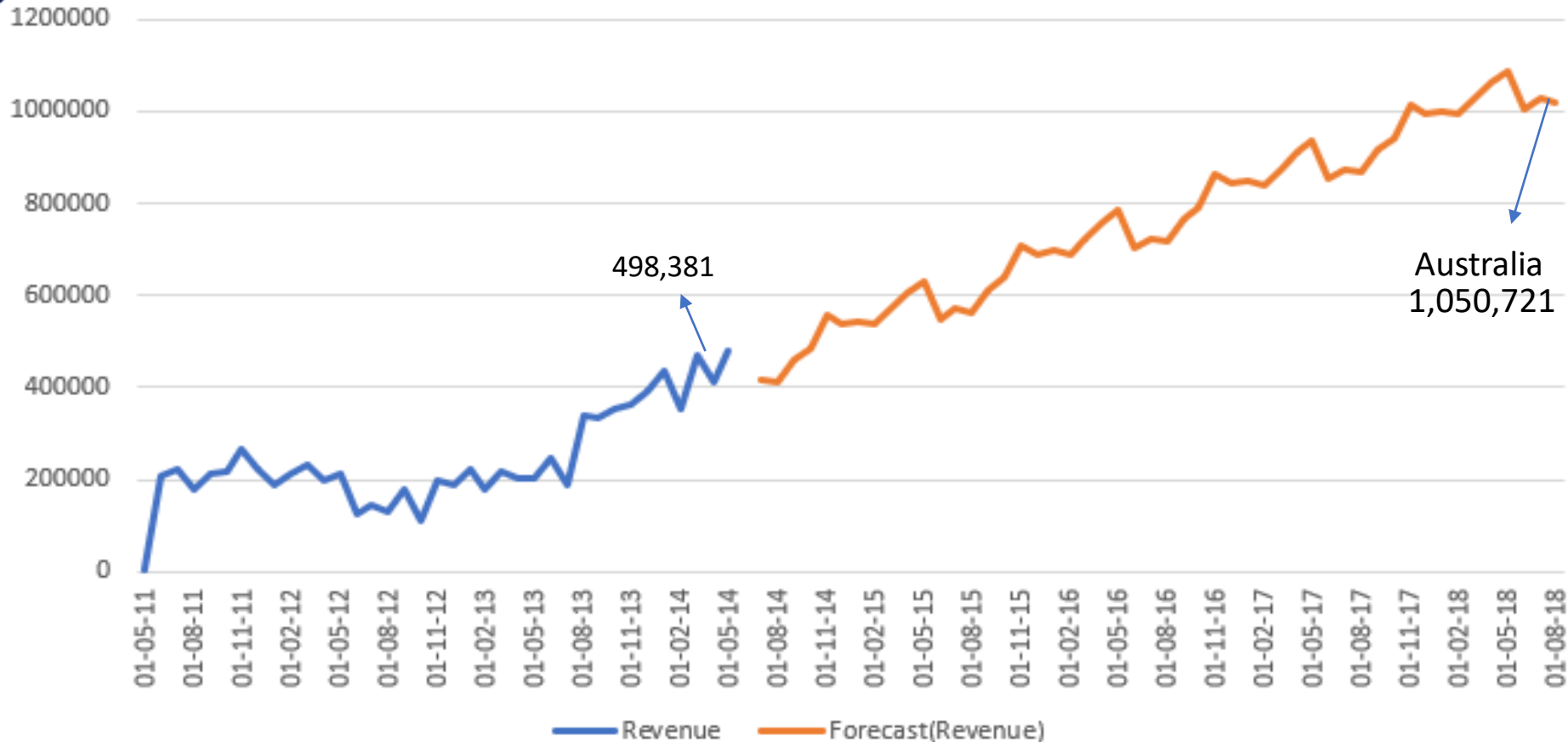


## Comments

- The highest quarterly sales in Australia was in the 3Q 2013, where sales revenue were \$452k.
- The 5-year estimates are not reliable because the data period is short and there are numerous fluctuations.



## Online – 5 Years Sales Forecast



- The highest quarterly sales was in the 1Q 2014, where sales revenue was \$1.050k in Australia.
- In 5 Years Forecast of the Australia shows an increment of 76% in revenues.

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# AHG





# AHG Strategy



AHG's focal point strategy is to allow more target market segments to be reached via reseller channels. Customers increasingly expect products to be available via more than one channel and this is tipped to enhance higher revenues. Regions like Australia Germany, and France had better reseller performances. AHG's reseller regions like Central US, Northeast US, and southeast should consider transferral to online channels for a duration to help with customer onboarding and acquisition to boost reseller channel. e.g., if retail outlets have no stock online then customers can buy via distribution stores.

Improved commitment to the Reseller **E-Bicycle market**. Reseller regions such as Central US Northeast US and the southeast US are witnessing a shift in customers' motive for buying an E-bike from leisure to daily use. With increasing demand for zero-emission climates. The e-bike market is tipped to generate around 53.5 billion U.S. dollars in revenue by 2027, with a compound annual growth rate of around 12.27 percent between 2016 and 2027. Prospective innovation for the future.

**AHG should consider discontinuing business with the reseller channel.** With \$81k total revenue and COGS at \$82k, and a negative profit of (\$1,788). This can occur if your sales increase comes from higher sales of low-margin items while you suffer a decrease in sales of high-margin products. Even during good times, it's important to track your sales by margins, territory, distribution channel, and sales rep to spot trends that might lead to problems. If your profit margins aren't rising, chances are your company isn't thriving. Thus, AHG should close the Reseller channel till a better strategy for cash flow is available.

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**Conclusion, recommendation & Acknowledgements**



# Conclusion



- There is a clear drift, between May 2013 and July 2013, the number of Online transactions increased significantly by 370%.
- The report discloses that while the reseller sales had a significant increase in overall revenue from 2011 to 2014, the Online segment surpassed reseller sales first ever in 1 Quarter of 2014.
- **Clothing and Accessories** segments were both introduced in May 2013, these segments had a significant shift from reseller sales to Online sales.
- The Total reseller revenue of the bike segment represents 73.40% of Bike sales with a negative profit. These were a result of the reseller segment of Touring bikes and Road bikes experiencing a negative profit of £1.7Million.
- The **Reseller channel** for Central US, Northeast US, and Southeast Market decelerate the growth and frightful Online sales. The focal point for AHG should be on Gift cards and Discount offers to boost the online segment for the reseller channels.
- **Shipping cost:** At 23,815.75, OVERNIGHT J-FAST had the highest Ship rate and was 923.65% higher than XRQ – Truck Ground, which had the lowest Total Ship Base at 2,326.55. AHG should consider carrying out consolidated freight shipments and negotiate to build a better relationship with other carriers so they can obtain discounts and reduce costs.
- **Late Delivery** diverged the most when the Vendor was Jeff's Sporting Goods when late Delivery was 7,850 higher than Early Delivery. AHG should reconsider doing business with vendors with late delivery status.
- In relation to the **Market Basket Analysis**, The product that should be sold together to boost profitability is the following  
MTT with Mountain tire/Finder set/Water bottle and water bottle cage.  
Helmet with Long sleeve/Bike wash/Full Hand gloves.

# Recommendations



- Revenue for resellers started trending up, resulting in a 1,733.02% increase between April 2011 and April 2014. AHG should launch the Online Components Category market and cross-selling will increase sales.
- **To fully minimize scrap and waste**, processes must be streamlined from end to end, beginning with the initial sales contact through the final delivery of the order. Mistakes or inefficiencies at any phase can result in unnecessary waste. AHG should Robust process control measures for identifying the causes of defects, ensuring adherence to design specifications
- OVERNIGHT J-FAST had the **highest Ship rate**. AHG should focus on companies that offer cheaper and quality services like XRQ Truck Ground, they offer exclusive discounts on your port charges and besides carrying out all the documentation processes, allowing AHG time to focus on its core business.
- **Days Delay Delivery:** 31% of work orders are Late; Turns out technology can provide a solution even in dire cases. AHG should consider web-based tracking, courier companies can locate and dispatch the nearest driver to the vehicle experiencing issues and relay all necessary packages to the end destination on time and in priority sequence.
- The minimum price is higher than the average price of Road bikes and MTB. We propose a decrease in prices in order to penetrate the market. Rising prices will cause customers to reject your product or service in favor of cheaper alternatives.
- **Total Budget and Actual Cost** are positively correlated with each other across different years. AHG should audit the manufacturing process for likely manipulation of expenses or fraudulent disbursements.