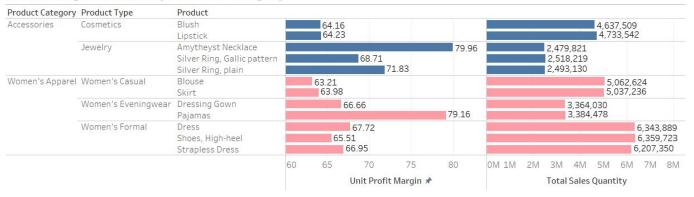
## **GROUP 8**

PRODUCT CATEGORIES: WOMEN'S APPAREL AND ACCESSORIES

Aayush Vikram Shah Sarita Ghosh Subhiksha Mukuntharaj Vaibhav Vasanth Rao Prathamesh Satyawan Mahankal

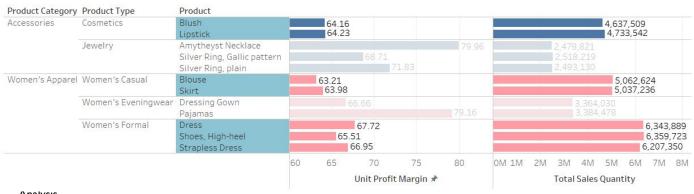
## Profit Margin vs Sales by Product Category



The plot on the left shows the Unit Profit Margin and the Total Sales Quantity for each product.



## Profit Margin vs Sales by Product Category

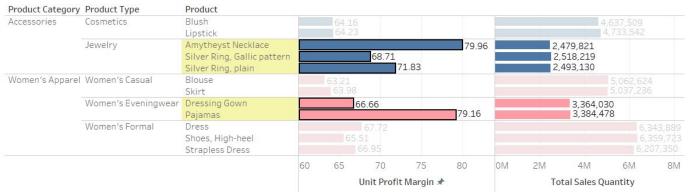


The plot on the left shows the Unit Profit Margin and the Total Sales Quantity for each product.

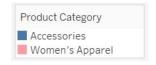


- High correlation between Product Type and Sales Quantity
- All Products that are doing well in terms of Sales Quantity have a low Profit Margin
- In terms of Sales Quantity, the following Products are doing well:
  - Accessories Cosmetics (Blush, Lisptick)
  - Women's Apparel Women's Casual (Blouse, Skirt)
  - Women's Apparel Women's Formal (Dress, Shoes High Heel, Strapless Dress)

## Profit Margin vs Sales by Product Category



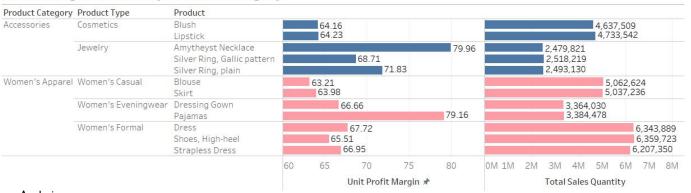
The plot on the left shows the Unit Profit Margin and the Total Sales Quantity for each product.



- High correlation between Product Type and Sales Quantity
- All Products that are doing well in terms of Sales Quantity have a low Profit Margin
- In terms of Sales Quantity, the following Products are doing well:
  - Accessories Cosmetics (Blush, Lisptick)
  - Women's Apparel Women's Casual (Blouse, Skirt)
  - Women's Apparel Women's Formal (Dress, Shoes High Heel, Strapless Dress)

- In terms of Sales Quantity, the following Products are not performing well:
  - Accessories Jewelry (Amethyst Necklace, Silver Ring Gallic Pattern, Silver Ring plain)
  - Women's Apparel Women's Eveningwear (Dressing Gown, Pajamas)

## Profit Margin vs Sales by Product Category



The plot on the left shows the Unit Profit Margin and the Total Sales Quantity for each product.



#### Overall Trend

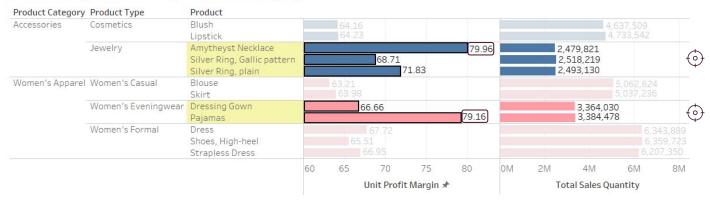
 Women's Apparel is doing better than Accessories in terms of Sales Quantity

- High correlation between Product Type and Sales Quantity
- All Products that are doing well in terms of Sales Quantity have a low Profit Margin
- In terms of Sales Quantity, the following Products are doing well:
  - Accessories Cosmetics (Blush, Lisptick)
  - Women's Apparel Women's Casual (Blouse, Skirt)
  - Women's Apparel Women's Formal (Dress, Shoes High Heel, Strapless Dress)

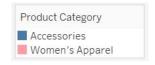
- In terms of Sales Quantity, the following Products are not performing well:
  - Accessories Jewelry (Amethyst Necklace, Silver Ring Gallic Pattern, Silver Ring plain)
  - Women's Apparel Women's Eveningwear (Dressing Gown, Pajamas)

## Q.I.2. MARKETING STRATEGY: WHAT SHOULD BE DONE IN THE NEXT YEAR TO MAXIMISE PROFITS?

## Profit Margin vs Sales by Product Category



The plot on the left shows the Unit Profit Margin and the Total Sales Quantity for each product.



### Recommended Strategy I - Capitalize on High Margin Products:

- · Focus products that have high profit margins, but are not selling in high quantities
- Who is the target customer? Optimize Marketing Strategy accordingly
- Consider offering discounts/promotions, or even reducing the selling price of these products
  - Specific Products to Feature:
    - Accessories Amethyst Necklace
    - Women's Apparel Pajamas

## Q.I.2. MARKETING STRATEGY: WHAT SHOULD BE DONE IN THE NEXT YEAR TO MAXIMISE PROFITS?

## Product Margin vs Product Sales Quantity vs Product Sales Amount



### Recommended Strategy I - Capitalize on High Margin Products:

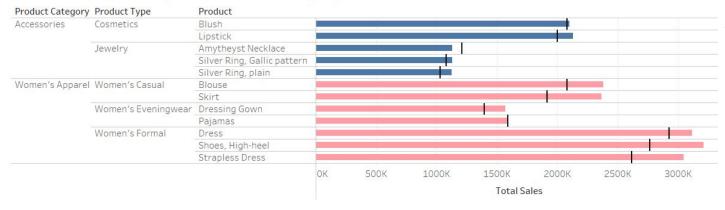
- · Focus products that have high profit margins, but are not selling in high quantities
- · Who is the target customer? Optimize Marketing Strategy accordingly
- Consider offering discounts/promotions, or even reducing the selling price of these products
  - Specific Products to Feature:
    - Accessories Amethyst Necklace
    - Women's Apparel Pajamas

### Recommended Strategy 2 - Revise Pricing

- High-heeled shoes are generating almost half the revenue as compared to other Women's Formal products, despite having a similar profit margin and being sold in similar quantities
- This difference in Sales Amount can be attributed to differences in their lower Selling Price
- The company could revise their pricing strategy for such products, and spend more on marketing these products so as to ensure that they sell in similar volumes, albeit with a higher price tag

# Q.I.3 & 4. HOW ARE THEY PERFORMING AGAINST TARGET? DO YOU EXPECT THEM TO MEET THEIR 2014 TARGET?

## Sales Quantity vs Targets by Product Category

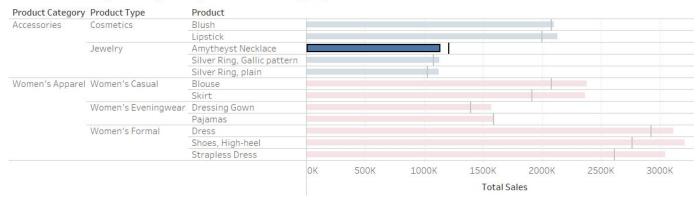


The plot on the left shows the Total Sales Quantity and Sales Quantity Target for each product.



# Q.I.3 & 4. HOW ARE THEY PERFORMING AGAINST TARGET? DO YOU EXPECT THEM TO MEET THEIR 2014 TARGET?

## Sales Quantity vs Targets by Product Category



### **Analysis**

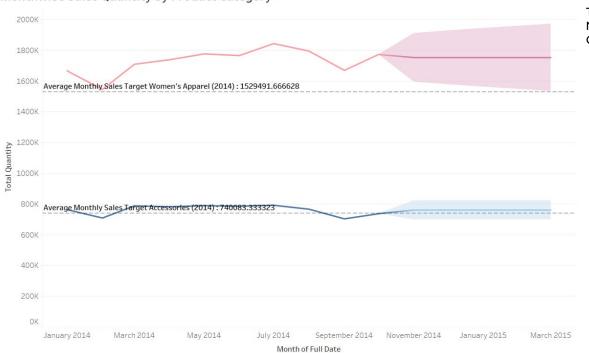
- Looking at Year-to-Date performance, all products except Amethyst Necklace have achieved/exceeded their targets
- Products such as Shoes and Dress/Strapless Dress have exceeded their targets by a very large margin, and this could potentially make up for the deficit for Amethyst Necklace

The plot on the left shows the Total Sales Quantity and Sales Quantity Target for each product.

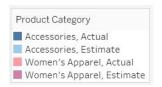


# Q.I.3 & 4. HOW ARE THEY PERFORMING AGAINST TARGET? DO YOU EXPECT THEM TO MEET THEIR 2014 TARGET?

## Monthwise Sales Quantity by Product Category

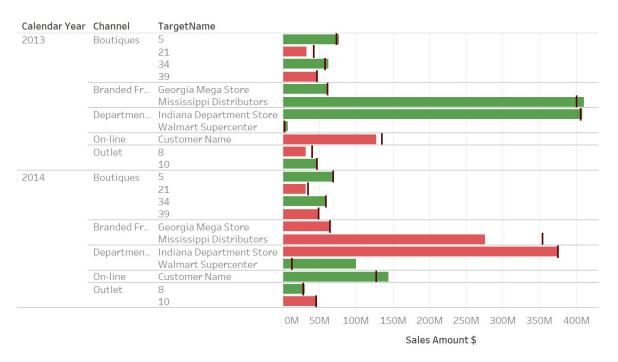


The plot on the left shows the Total Sales Quantity, Average Monthly Sales Quantity Target, and forecasted Sales Quantity for each Product Category.



- The Women's Apparel product category has been consistently performing well, with Sales Quantities exceeding their targets every month. This product category is on track to achieve/exceed its 2014 target.
- Accessories have fairly constant Sales so far, with Sales Quantities exceeding targets in most months.
   However, the forecasted values for this category suggest a possibility of targets not being met.
- Overall, the cumulative target for both categories will be met, especially because of the large margin with which Women's Apparel is set to exceed its target.

# Q.2 RECOMMEND SEPARATE 2013 AND 2014 BONUS AMOUNTS IF THE TOTAL BONUS POOL FOR 2013 IS \$1mn AND FOR 2014 IS \$2mn



#### **Details:**

- The plot on the left shows the Total Sales Amount for each of the two years - 2013 and 2014, and for and each TargetName within every Channel.
- These Sales Amount are then compared to the individual targets for each of these TargetNames.
- The Sales Amounts for TargetNames that meet their individual targets are shown in green while the ones that don't are shown in red.

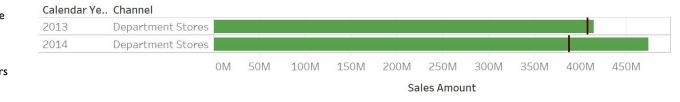
\*\* Disclaimer: The targets and sales amounts for the 2014 data are only available till October. \*\*

- The number of target names failing to meet their targets increase from 2013 to 2014.
- Out of the four Resellers in our list, all manage to reach their individual targets in 2013. While only one of the four manages to reach its target in 2014.

# Q.2 RECOMMEND SEPARATE 2013 AND 2014 BONUS AMOUNTS IF THE TOTAL BONUS POOL FOR 2013 IS \$1mn AND FOR 2014 IS \$2mn

## Distribution of the bonus - Why Only TargetName-wise And Not Channel-wise?

- While going through the first graph on the right, we can see that the channel 'Departmental Stores' made even higher profits in 2014 than they did in 2013.
- A decision to provide bonus to all resellers in this channel would not be fair. The reason for this can be seen in the second graph on the right.
- While both Indiana Departmental Store and Walmart Supercenter surpass their targets in 2013, only Walmart manages to repeat this feat in 2014.
- Going by the success of the channel while distributing bonus disregards the margin Walmart exceeds its target by
- Distributing the bonus among the targetnames based on their performance thus makes more sense.





## Calculations For Determining Bonuses

- We currently have Sales Amounts and Target Sales Amounts for each of the Year-Channel-TargetName pair.
- We can calculate the difference between these two values, and keep only the values that are positive (in this case we are disregarding all the instances where targets are not being reached)

•

# Q.2 RECOMMEND SEPARATE 2013 AND 2014 BONUS AMOUNTS IF THE TOTAL BONUS POOL FOR 2013 IS \$1mn AND FOR 2014 IS \$2mn

## 2013 (Bonus Pool: \$1mn)

Channel	TargetName	SalesAmount	TargetSales	SalesDiffer	PositiveDiff	Percentage	Bonus
Boutiques	5	76,448,438	72,827,000	3,621,438	3,621,438	12.58%	125,751
	21	32,546,862	41,528,000	-8,981,138	0	0.00%	0
	34	62,245,946	57,305,000	4,940,946	4,940,946	17.16%	171,569
	39	46,123,021	46,847,000	-723,979	0	0.00%	0
Branded Franchise	Georgia Mega Store	61,433,024	60,500,000	933,024	933,024	3.24%	32,398
	Mississippi Distributors	410,915,216	400,000,000	10,915,215	10,915,215	37.90%	379,019
Department Stores	Indiana Department Store	407,735,647	405,500,000	2,235,647	2,235,647	7.76%	77,630
	Walmart Supercenter	6,955,048	1,787,671	5,167,377	5,167,377	17.94%	179,432
On-line	Customer Name	127,246,137	135,500,250	-8,254,113	0	0.00%	0
Outlet	8	30,664,139	40,262,000	-9,597,861	0	0.00%	0
	10	47,916,947	46,932,000	984,947	984,947	3.42%	34,201

- Among all the resellers that get bonuses, majority is distributed to the Mississippi Distributors.
- Walmart and Boutique 34 get the next best share of the remaining bonus, while Boutique 5 and Indiana Department Store follow them..

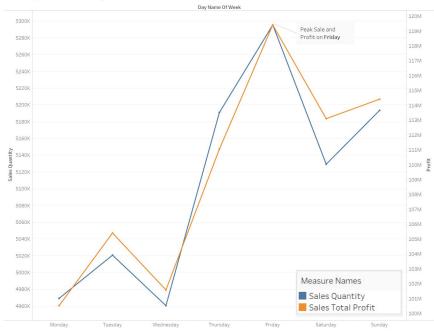
## **2014 (Bonus Pool: \$2mn)**

Channel	TargetName	SalesAmount	TargetSales	SalesDiffer	PositiveDiff	Percentage	Bonus
Boutiques	5	68,719,159	68,295,890	423,269	423,269	0.40%	7,902
	21	31,256,024	34,148,362	-2,892,338	0	0.00%	0
	34	59,692,914	58,717,808	975,106	975,106	0.91%	18,204
	39	48,251,213	48,864,044	-612,831	0	0.00%	0
Branded Franchise	Georgia Mega Store	63,307,492	63,715,068	-407,576	0	0.00%	0
	Mississippi Distributors	275,056,623	354,389,041	-79,332,418	0	0.00%	0
Department Stores	Indiana Department Store	374,659,749	374,794,521	-134,772	0	0.00%	0
	Walmart Supercenter	99,508,971	12,657,534	86,851,437	86,851,437	81.07%	1,621,449
On-line	Customer Name	143,880,335	127,222,334	16,658,001	16,658,001	15.55%	310,992
Outlet	8	29,913,954	27,693,567	2,220,387	2,220,387	2.07%	41,453
	10	44,225,655	45,183,978	-958,323	0	0.00%	0

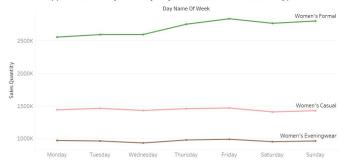
- Unsurprisingly, Walmart Supercenter gets the highest share of the \$2mn bonus.
- The online channel receives the next highest share of the bonus.
- Remaining bonus is distributed between two Boutiques and an Outlet

# Q.3.1. ASSESS PRODUCT SALES BY DAY OF THE WEEK WOMEN'S APPAREL

#### Sales Qty and Profit vs Day of the Week for Women's Apparel



#### Women's Apparel Sales Qty trend by Day of the Week and Ptoduct Type



## Analysis For Women's Apparel:

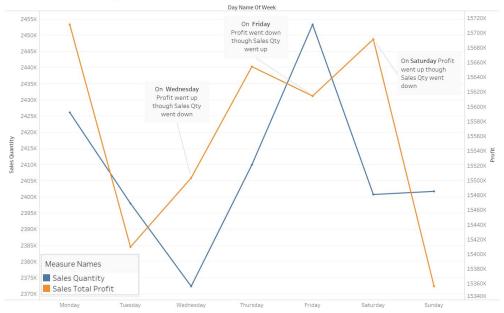
- · Maximum sales happen on Fridays!
- We see a dip in Sale on midweek, from Monday to Wednesday.
- Sales and Profit go hand in hand.
- Women's Casual and Eveningwear has very low variance throughout the week.
- Women's Formal sales increase in weekend.

#### Recommendations:

- Special Discount/demo for Women's Casual and Eveningwear on weekends.
- Start some midweek promotion to attract more consumers. For the Women's Apparel category

## Q.3.2. ASSESS PRODUCT SALES BY DAY OF THE WEEK FOR THE ACCESSORIES

#### Sales Qty and Profit vs Day of the Week for Accessories



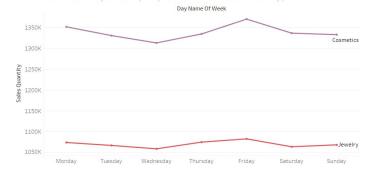
### Analysis For Accessories:

- Maximum sales happen on Fridays!
- · Profit peaks on Mondays!
- Contrasting trends between Sales Quantity and Profit in multiple days.

### Two Probable Reasons of contrasting trend:

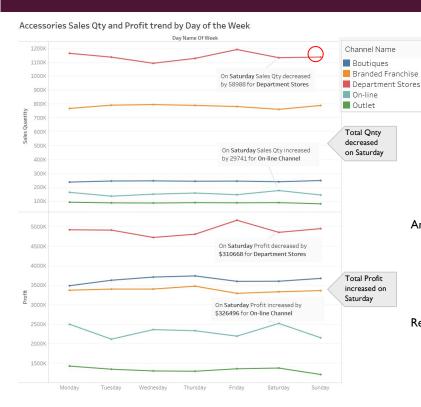
 High Profit Product(Jewelry) might be selling more on high profit days. But our analysis says that the trend are not contransting for jewelry and cosmetics.

#### Accessories Sales Qty trend by Day of the Week and Ptoduct Type

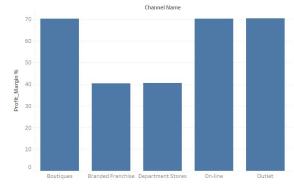


 There could be a dependency on the different channels that sell Accessories.(We are focusing on it in the next slide)

## CHANNEL BASED ANALYSIS FOR ACCESSORIES



#### Profit Margin of different Channels for Accessories



### Analysis:

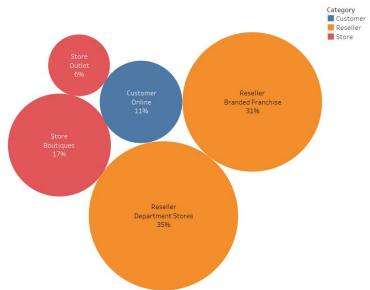
- Sales Quantity variance is high for Departmental stores and Online Channel.
- Departmental Stores sell around 6 times compared to Online Channel in terms of Quantity.
- Whereas, Departmental Stores' profit is just twice than the same of Online Channel.
- Online Channel has high profit margin, as a result Sales quantity increase in Online Channels on Saturdays result in high profit even though the total Sales Quantity is low on Saturdays.

#### Recommendations:

- Promotional Discounts on Departmental Stores on Weekends.
- Monthly midweek reward day for Online Channel(Tuesday) and Departmental Stores(Wednesday).
- Making sure the websites are up and running on Saturdays and Mondays for On-line channel.

# Q.4.1 LEVERAGING LOCATIONS, CHANNELS, STORES AND RESELLERS TO MAXIMIZE SALES

Share in the market by Channel



## **Largest Market Share:**

Reseller has almost 66% of the Total Sales Amount

## **Second Largest Market Share:**

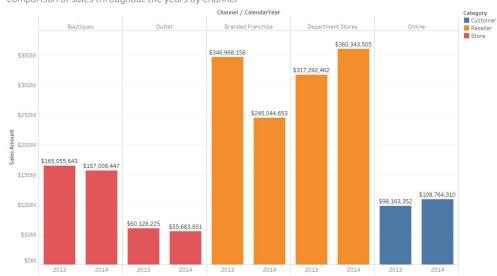
Store has the second highest share of approximately 23%

## **Smallest Market Share:**

Customer has almost 11% of the Total Sales Amount

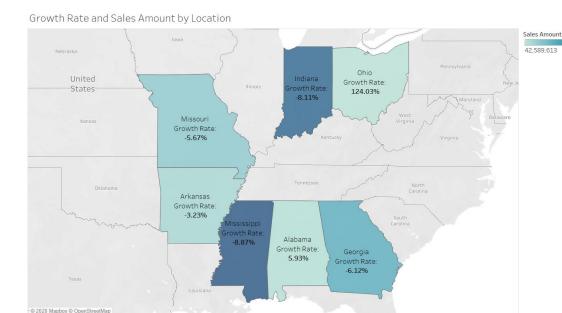
## Q.4.2 SALES THROUGH THE YEARS BY CHANNEL





- Even though Reseller has the maximum share, only Department Stores sees an increase in the revenue from 2013 to 2014
- The online channel also sees an improvement in the total sales from 2013 to 2014
- Store doesn't see a change in it's total sales amount over the years.

## Q.4.3 SALES AND GROWTH RATE BY LOCATION

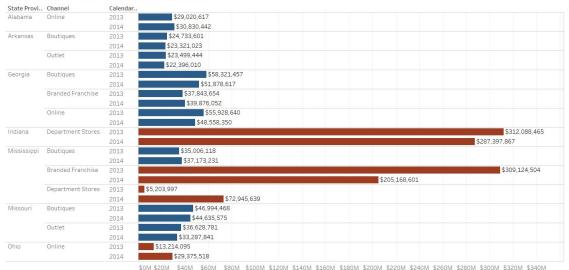


Growth Rate = (Sales Amount in 2014 - Sales Amount in 2013) / Sales Amount in 2013

- We can observe that Indiana and Mississippi are the two states that have the largest share in the Market
- Even though they have the largest shares, they see a decline in the growth rate
- The growth rate has increased exponentially for Ohio

## Q.4.4 SALES BY LOCATION AND CHANNEL



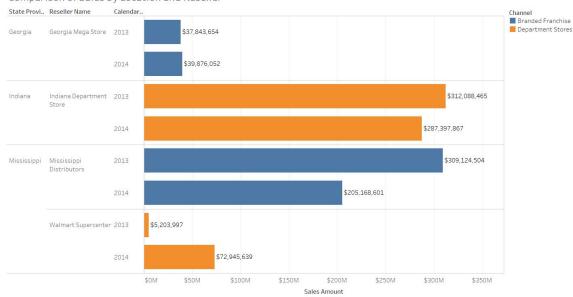


Sales Amount

- Department stores even though is doing really well in 2014 against 2013, we can see a significant drop in the Sales Amount in Indiana for Department Stores
- The original increase in sales of the Department Stores can be attributed to the increase of sales in Mississippi
- We can hypothesize that this increase in the sales of Department Store might have been because of a new Departmental store being opened at the end of the year in 2013 in Mississippi
- This might have caused the huge drop in the sales for Branded Franchises
- As seen earlier, we can also see a huge increase in sales in Ohio from 2013 to 2014

## Q.4.5 SALES BY LOCATION AND RESELLER

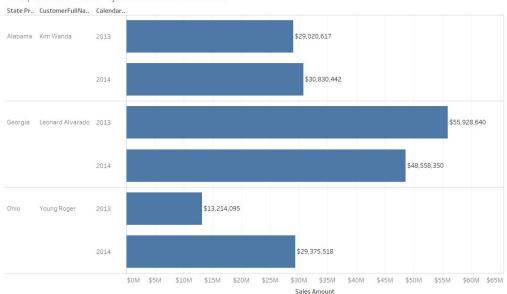




- Earlier we saw that Departmental Stores are seeing an increase in growth of sales.
- Here we can confirm that in Mississippi, Walmart Supercenter has caused a huge positive jump in sales
- While the sales of Mississippi Distributors is decreasing at a large rate.
- We have hypothesized that this
   Departmental Store Walmart Supercenter
   has opened up recently and has impacted
   the sales for Mississippi Distributors.

## Q.4.6 SALES BY LOCATION AND CUSTOMER





### Analysis:

- We earlier had noticed a growth rate of 124% in Ohio.
- This is due to a Customer Young Roger who is causing a great increase in the Sales Revenue.

### Recommendations:

- For Mississippi, we can leverage the Department stores in Reseller channel to make more sales
- For Indiana, we can open up more types of channels like Online and Store as it only has Department Stores currently
- Ohio can continue gaining more customers for Online channel

## **THANK YOU**

**QUESTIONS?**