



# Maximizing Revenue through Customer Insights

Group C, Team Alpha  
E-Commerce Team  
Blackwell Industries

# OUR OBJECTIVE

**Compare client demographics** across 4 regions of Blackwell Electronics to investigate and **learn from customer purchase behavior.**

Make recommendations geared towards **expanding our presence** in all regions and **maximizing revenue** generated from e-commerce sales.



# BLACKWELL ELECTRONICS DATA

## Data From Blackwell Electronics

- Customer age range 18-85
  - Millennials (18-40)
  - Generation X (41-60)
  - Baby Boomers (61-80)
  - Silent Generation (81+)
- Range of items per transaction (1-8)
- Amount spent (\$5-\$3000)
- Region (1,2,3,4)
- In-Store or Online Purchase

## Revenue Highlights

Seeing growth in online presence

Total Sales online \$35.89M

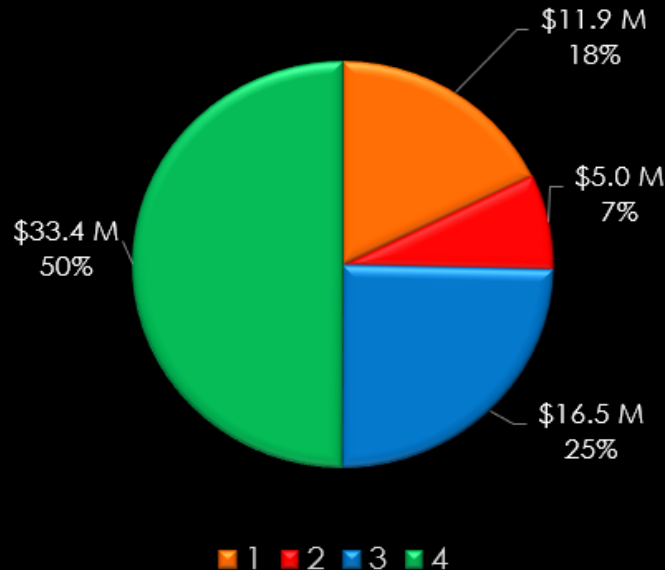
Total Sales in-store \$30.95M

### **Sales revenue**



# BLACKWELL'S REGIONAL SALES

Total Sales by Region



## Insights Gained

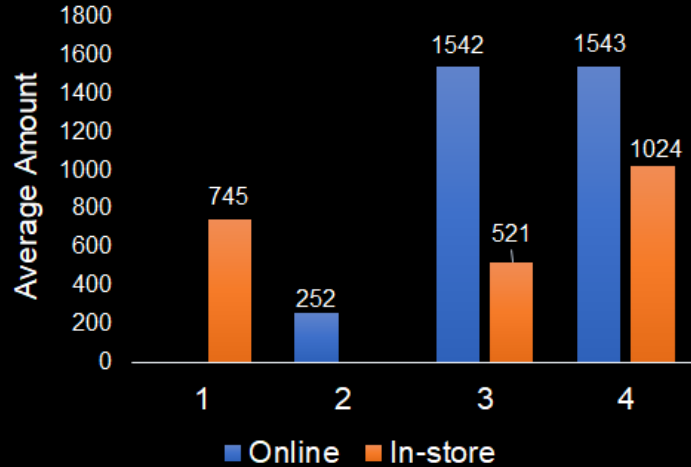
- Highest revenue generator is Region 4, 50% (\$33.4M) with an avg. sales/transaction \$1,284
- Region 2 provides the biggest opportunity to increase sales 7% (\$5M) with an avg. sales/transaction \$252

## Recommendations

- Identify what marketing techniques are being used in Region 4 and apply them throughout
- Compare and contrast these company wide result to the online vs. in-store findings

# REGIONAL SALES BY SHOPPING METHOD

Average Spent per Transaction



Total Sales by Shopping Method



## Insights Gained

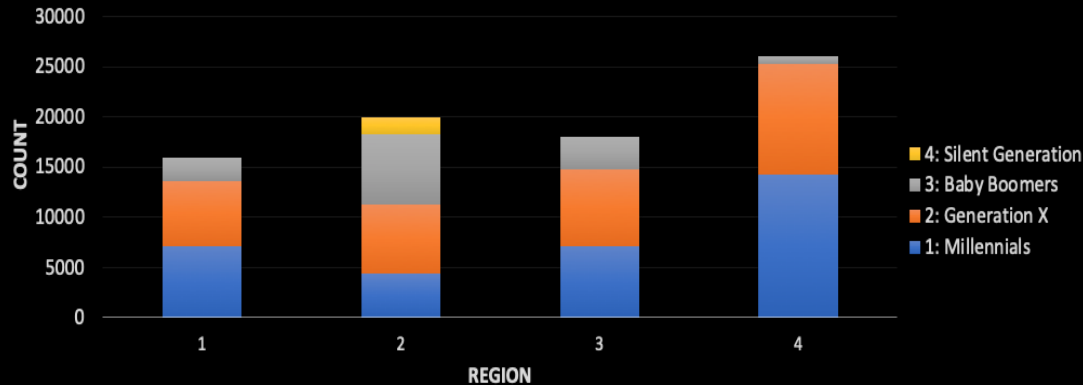
- Top regions 4 & 3, respectively, spend 1.5 to 3 times more online than in-store
- Region 1 buys in-store only
- Region 2 buys online only (least online)

## Recommendations

- Consider online marketing in untapped regions
- Target customers strategically on factors that make a difference
- Explore age as key demographic

# DIFFERENCES IN AGE OF CUSTOMERS BETWEEN REGIONS

**Breakdown of Transactions by Age Group and Region**



## Insights Gained

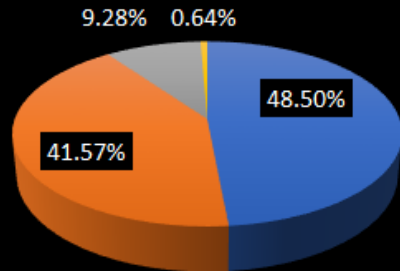
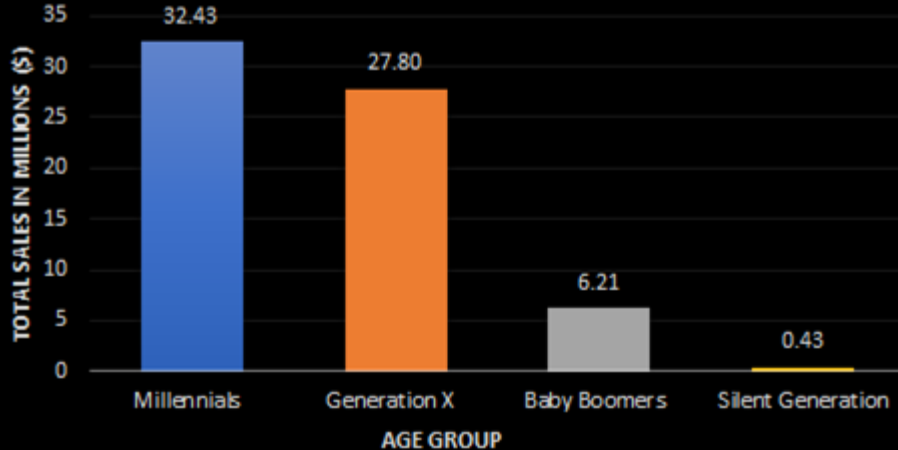
- Region 4 attracts mostly younger customers with the most millennials and Gen X transactions
- Region 2 draws in an older demographic, being the only one with Silent Generation shoppers

## Recommendations

- Consider ramping up direct marketing activities to the untapped millennial market in region 2

# SALES REVENUE BY AGE GROUP

Sales by different Age group



## Insights Gained

- Millennials (18-40) contribute almost 48.5% (\$32.43M) to the total revenue
- Generation X (41-60) contributes 41.5% to the total revenue
- Baby boomers (61-80) and Silent generation(81+) contribute only 10% to total revenue

## Recommendations

- Target Baby boomers to increase revenue (Design Changes to website/ Special deals/ focus on Customer service in store)

# AVERAGE AMOUNT PER TRANSACTION

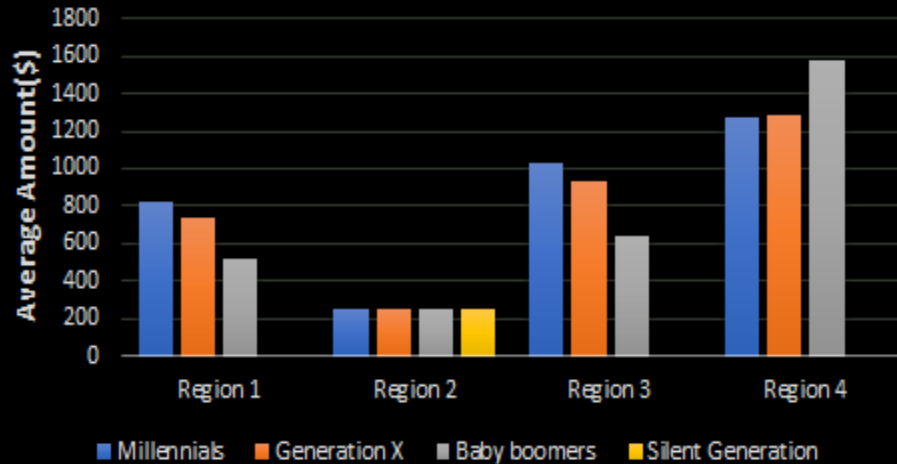
## Insights Gained

- Average amount per transaction spent by the same age group differs by region
- Customers spend more on an average per transaction in Region-4 followed by Region-3, 1 and 2
- Baby boomers spend more on an average per transaction than millennials in Region-4

## Recommendations

- Collect more data to understand why customers in Region-4 spend more and Region-2 spend less.

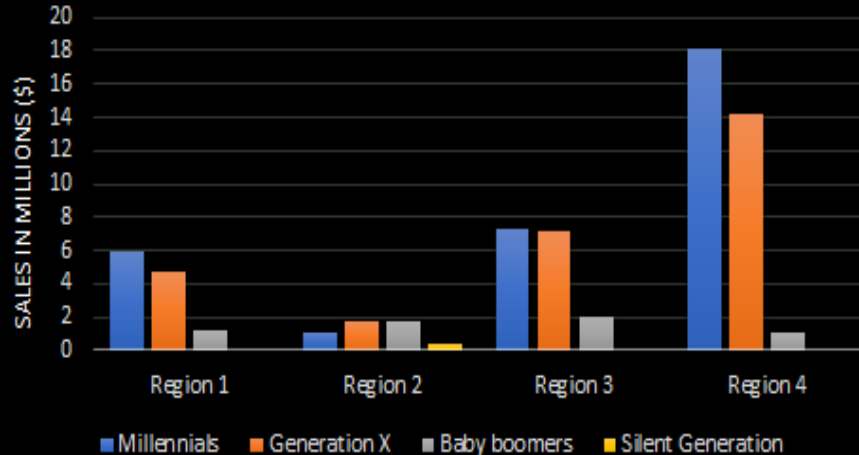
**Average amount per transaction by different age groups**





# REGIONAL SALES BY AGE GROUPS

**Sales revenue by different age group  
in all regions**



## Insights Gained

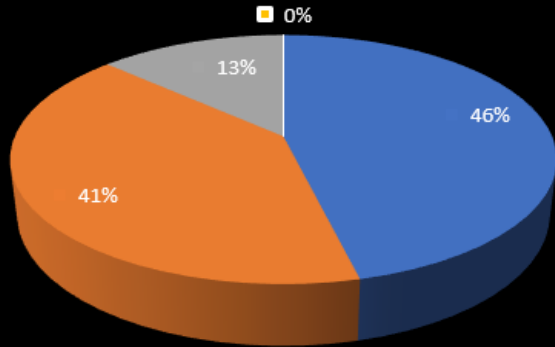
- Millennials(18-40) contribute the most to revenue in all the regions, except Region-2.
- In Region-4, though baby boomers (above 60) spent more on an average than millennials, their #transactions is less and hence their contribution to total revenue is lesser
- Millennials (18-40) in Region-4 alone contribute \$18M (27%) of total revenue

## Recommendations

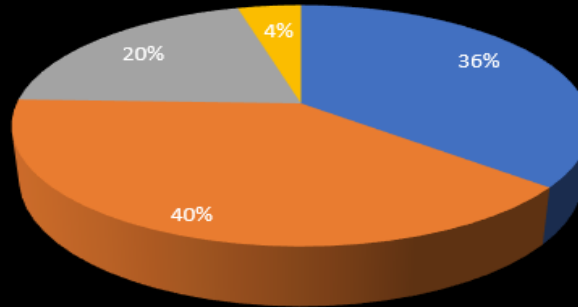
- Do more marketing in Region 1,2 and target millennials in particular.
- Target baby boomers in Region 4.

# WHO ARE THE CUSTOMERS FOR ONLINE & IN-STORE SHOPPING?

In-store customers in each age group



Online customers in each age group



## Insights Gained

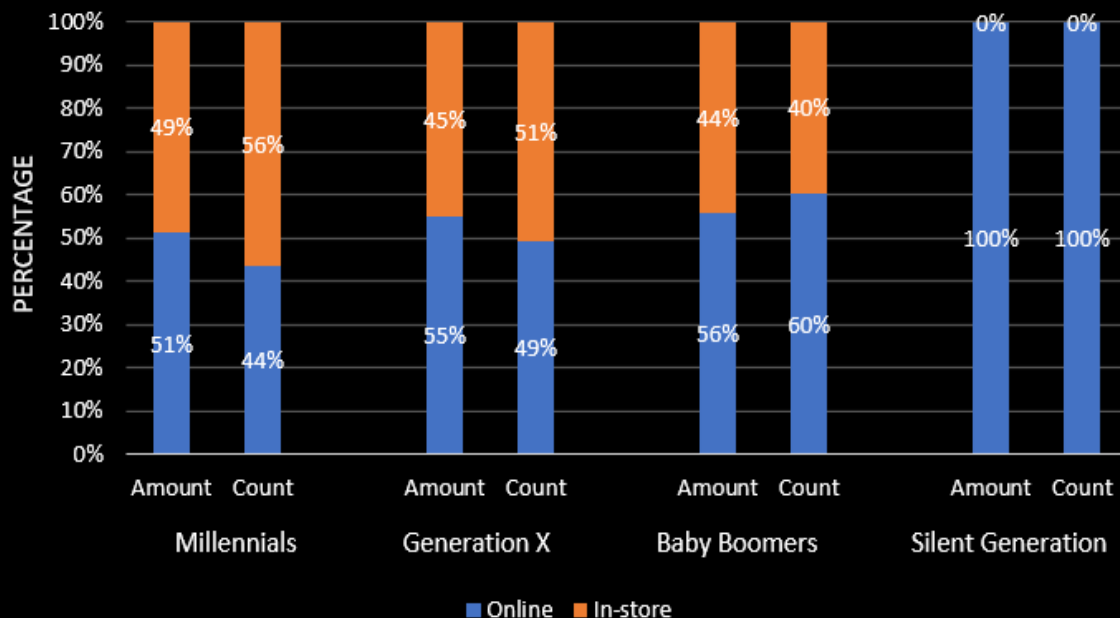
- Age above 60 (Baby Boomers & Silent Generation) prefers online shopping comparatively
- Millennials are the major contributors for In-store shopping
- Total Millennials shopping Online is less comparatively to the Generation X

## Recommendations

- Analyse why millennials tend to shop In-store
- Understand if the millennials have the potential to spend more, if we promote Online shopping to them

# INFLUENCE OF AGE IN SHOPPING METHOD?

Influence of Age in Shopping Method



## Insights Gained

- Millennials spend more on online even though the total transactions is less via online
- Both Baby Boomers & Silent Generation shoppers tend to shop & spend more online than in-store

## Recommendations

- Promote online shopping to Millennials
- Encourage Baby Boomers to continue the same trend

# SUMMARY & KEY OPPORTUNITIES

- Region 4 is the most mature market
- Regions 1 & 2 present untapped areas of growth
- Our youngest customers are our most profitable

## Recommendations

- Launch **awareness campaign** in Region 1 to drive current and net-new customers to our online offerings
- Conduct **cost-benefit analysis** of establishing a brick-and-mortar presence in Region 2
- **Boost ad-presence targeting younger market** across **Regions 1-3 & Baby Boomers in Region 4** to attract more lucrative customers and maximize revenue potential



# UNLOCKING DATA DRIVEN DECISIONS WITH DATA MINING

- What percent of customers are new customers? Will a typical online customers repeat business more or less than a typical in-store customer?
- What's the average income of people in the different regions? Do people in Region 4 make more money than those in Region 2?
- What are future sales projections based on historical sales? Will we hit revenue goals?
- What products have the customers bought before and regularly purchase? This can help in bundle recommendations and alerting best deals.
- Data Mining can untie the hidden pattern about the influence of age in the shopping, which in turn can answer the question what products can attract a particular age group.
- Data Mining techniques like Recommender Systems can help companies analyze which competitive items outperform others , and why; valuable in up-sell opportunities, bundling, and future inventory planning.





Data has a better idea

Thank You.