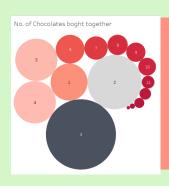
# X-CHOCOLATE INSIGHTS

THE MOST IMPORTANT FACTORS AFFECTING THE SALES OF X-CHOCOLATES.

#### **BRANDS**:

CUSTOMERS ARE FOCUSING MORE ON THE BRAND OF THE CHOCOLATE. BRAND 5 BEING THE MOST FREQUENT, FOLLOWED BY BRAND 2.





#### **QUANTITY OF CHOCOLATES BOUGHT:**

QUANTITY OF CHOCOLATES PURCHASED TOGETHER ALSO IMPACTS THE TOTAL SALE, (3,4,5,2,6) TOPS THE CHART. WITH MULTIPLE INSTANCES OF HIGHER NO. OF PURCHASES AS WELL.

#### **CUSTOMER'S PURCHASE HISTORY:**

EXCEPT FOR BRAND 5, NO OTHER BRANDS CHOCOLATES HAVE BEEN PURCHASED THE SECOND TIME.
THUS, MAKING IT STAND OUT.





#### **DAY WISE SALE:**

HIGHEST SALE HAS BEEN OBSERVED ON DAY 1, REST OTHER DAYS, THE SALE HAS NOT SHOWN MUCH CHANGE.

#### **AVG INCOME:**

THE AVG SALARY OF CUSTOMERS WHO PURCHASED OUR CHOCOLATES IS AROUND (126,706).



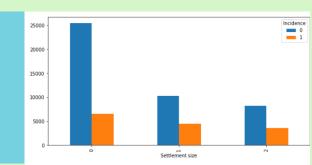


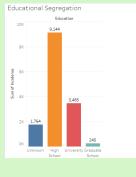
#### **AGE OF CUSTOMERS:**

THE AGE RANGE OF OUR TOP CUSTOMERS IS MULTIMODAL, (36,35,37) TOPPING THE CHARTS.

#### **CUSTOMER'S LOCALITY:**

MAJORITY OF CUSTOMERS COME FROM SMALL CITIES, FOLLOWED BY MID-SIZED AND BIG CITIES.



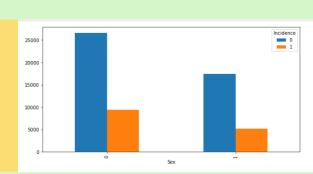


#### **EDUCATIONAL SEGREGATION:**

MOST OF OF CUSTOMERS HAVE AN EDUCATION QUALIFICATION OF HIGH SCHOOL, FOLLOWED BY UNIVERSITY, MISCELLANEOUS, GRADUATES.

#### **GENDER:**

WE HAVE MORE MALE CUSTOMERS W.R.T FEMALE CUSTOMERS.



## **METHODOLOGIES USED:**

## DATA PROCESSING:

- THE DATA WAS ALREADY CLEAN WITH NO NULL VALUES.
- THERE WERE SOME OUTLIERS IN THE DATA, AND WE LET THEM BE AS THEY WERE GOOD OUTLIERS PRESENT IN INCOME, QUANTITY AND PRICES.

## FEATURE ENGINEERING AND ANALYSIS:

- UNDERSTOOD THE DOMAIN, THIS BEING A RETAIL CASE.
- DID SOME FEATURE ENGINEERING LIKE EXTRACTING THE DAYS FROM THE DATASET AND TRYING TO FIGURE OUT THE PATTERN.
- UNDERSTOOD THE PATTERNS BY DOING UNIVARIATE, BIVARIATE ANALYSIS AND BY USING TABLEAU.

#### **MODELLING:**

 APPLIED MACHINE LEARNING ALGORITHMS TO UNDERSTAND THE MOST IMPORTANT FEATURES INFLUENCING THE SALE OF OUR CHOCOLATES.

### **POSSIBLE PROBLEM STATEMENTS:**

- HOW TO IMPROVE THE SALES OF THE CHOCOLATES?
- HOW TO ATTRACT THE TARGET AUDIENCE? / WHAT IS THE AGE GROUP OF OUR MOST FREQUENT CUSTOMERS?
- ON WHAT DAYS OF THE WEEK ARE WE MAKING THE HIGHEST SALES?
- FOR WHICH BRAND OF CHOCOLATE IS THE CUSTOMER COMING BACK AND REPURCHASING THE ITEM?
- HOW MANY CHOCOLATES IS THE CUSTOMER PURCHASING IN ONE INSTANCE?

## POSSIBLE SOLUTIONS / ACTIONS TO DEAL WITH THESE PROBLEM STATEMENTS:

- CLUB THE BRAND 5 CHOCOLATE WITH THE LEAST SELLING CHOCOLATE TO GENERATE MORE REVENUE.
- KEEP OFFERS ON BUYING A SET OF 3 OR MORE CHOCOLATES FROM DAYS 2-7.
- ADD SPECIAL DISCOUNTS ON CUSTOMERS FROM AGE 25+ (BEING PROBABLE PARENTS).