

A series of thin, black, overlapping lines forming various geometric shapes and polygons in the upper-left quadrant of the page.

Sankhya Analytics

# ANALYSIS OF CONSUMER BEHAVIOR OF A FMCG COMPANY

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# INTRODUCTION



- *Understand consumer behavior and suggest immediate action marketing strategies*
- *Real-time data of an FMCG company from the Sankhya Analytical Research Firm led by Mr. Vinayak Deshpande Sir.*
- *B2B company*
- *Multiple Channel Partners who sell the company's products to the public.*
- *The data is from 2018 and 2019.*



# OBJECTIVES

01

To identify which Channel partners responded to the launch of a new product and who to target first in the next planned campaign

02

Understand Consumer Behavior for both the Channel Partners and the end consumers

03

To develop scientific method of communication for the next planned campaigns

# STEPS

DATA MANAGEMENT

Compiling data files, data cleaning, Created variables

DESCRIPTIVE STATISTICS &  
DATA VISUALIZATION

Understanding the data better and presenting it visually

PREDICTIVE MODELLING

Answer objectives, using different Predictive model techniques- find Significant variables

TEXT MINING

Understand customer responses using various Text mining Techniques and answer Objective 1

# VARIABLES

Sales in 2018

Sales in 2019

Response Rate

Buying Frequency(2019)

Buying Frequency(2019-B1)

Active Partners(2019)

Active Partners(2019-B1)

Brand Engagement(2019)

Brand Engagement(2019-B1)

NPS

Buying Intervals

SMS

Call

Email

Portal

Rewards

Loyalty

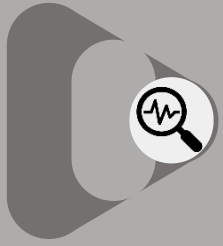
Region

Sales

No. of Complaints

Net Promoter Score

No. of years



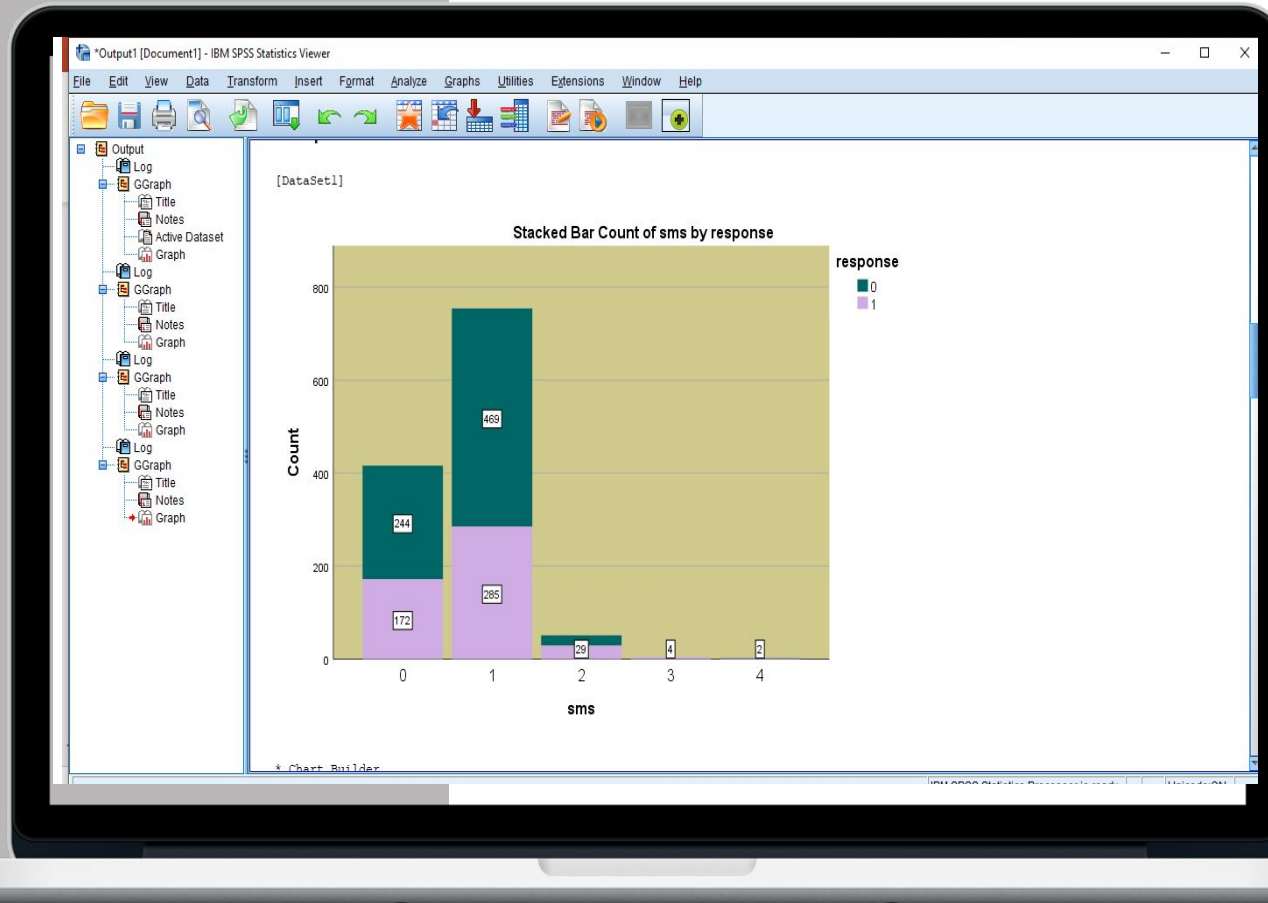
## DATA MANAGEMENT:

Created a master file using all data files

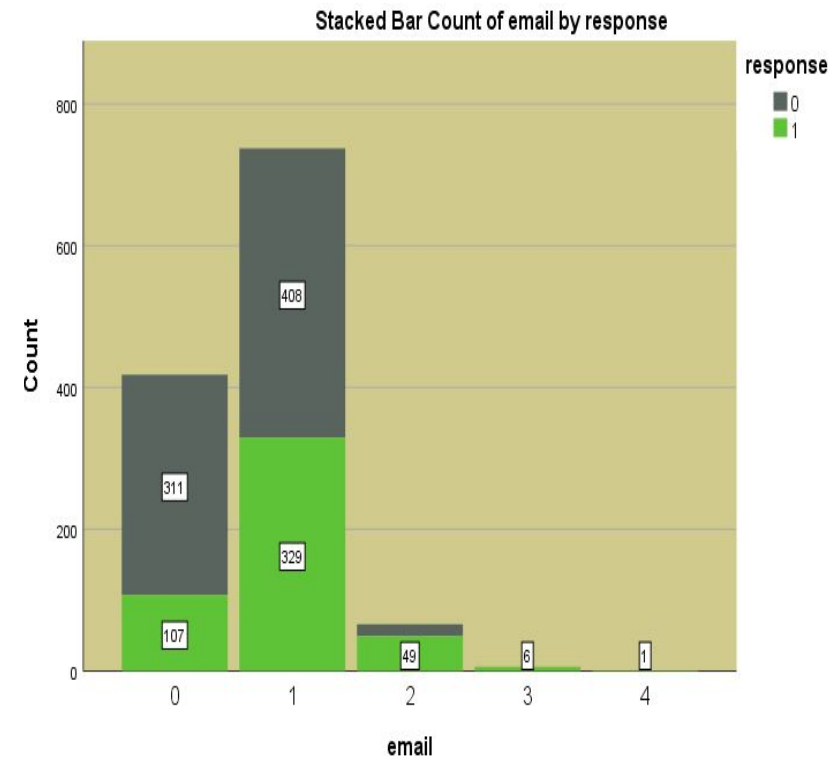
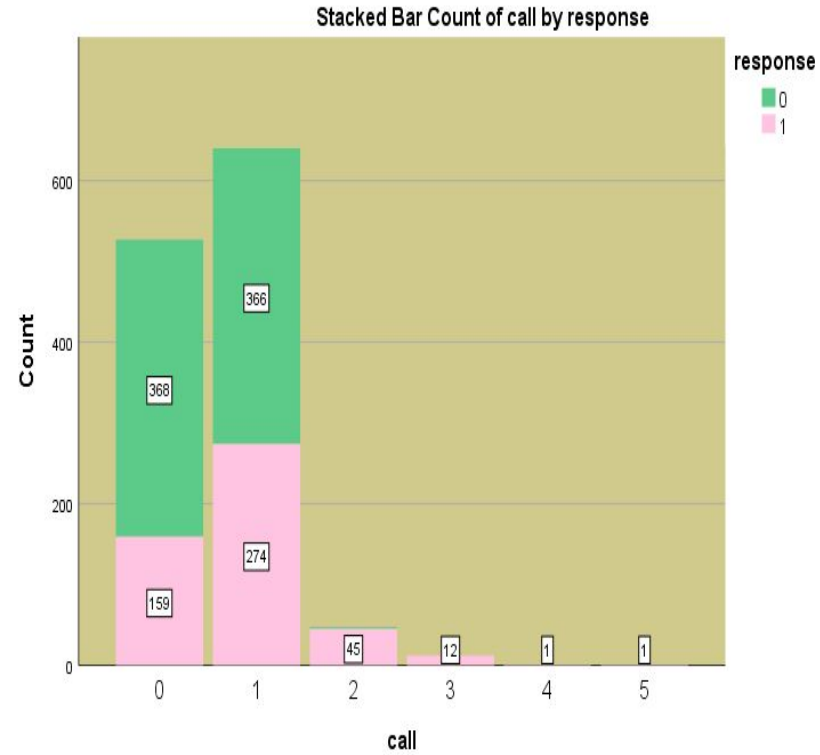
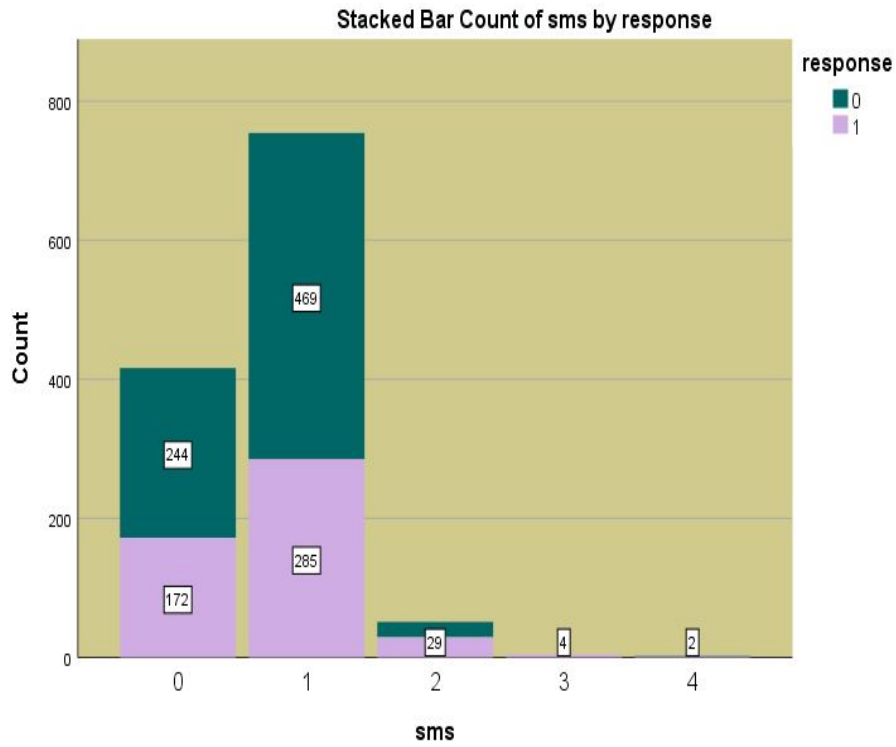
- Applied basic data checks like dimension or structure of the data
- Dropped irrelevant columns and merged with the other files and derived variables.
- Finally, composed a master file

# VISUALIZATION

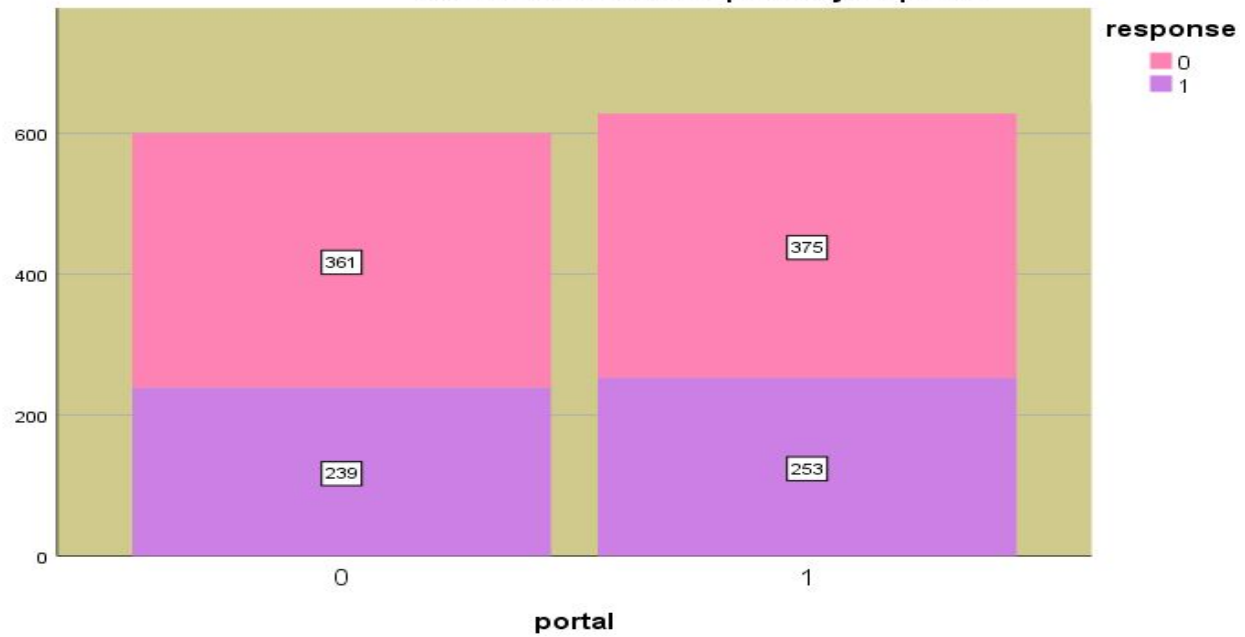
With the help of SPSS, visualization for responses according to the factors is produced.



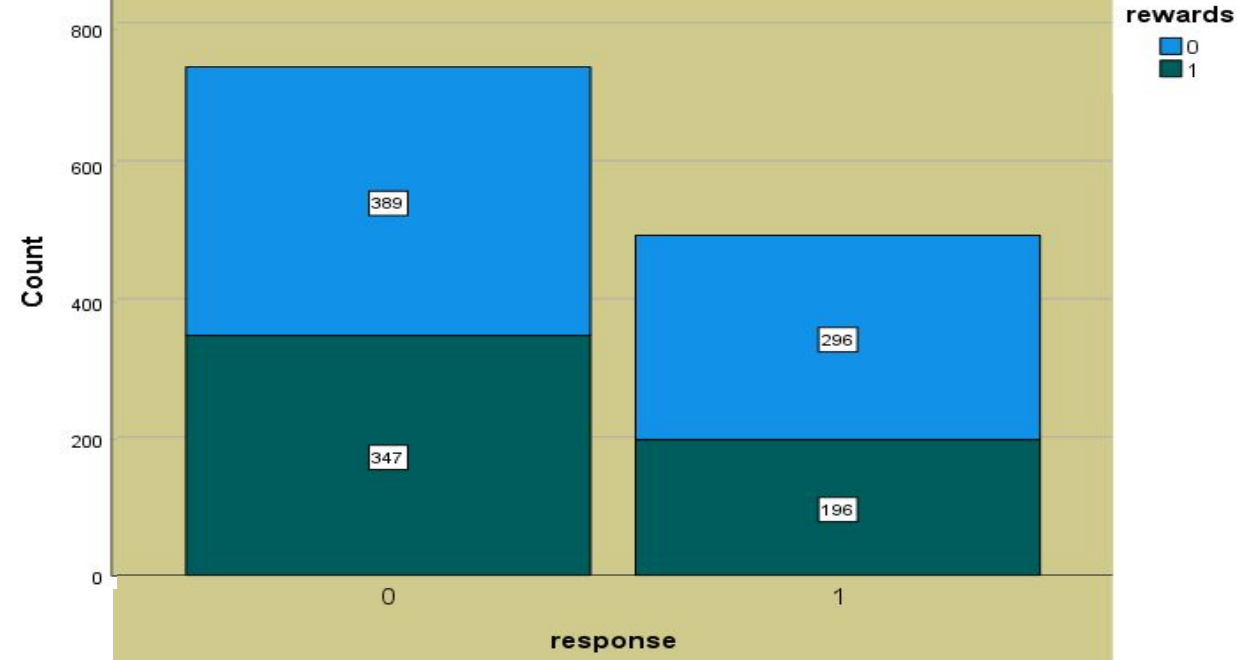
# VISUALIZATION- FACTORS



Stacked Bar Count of portal by response



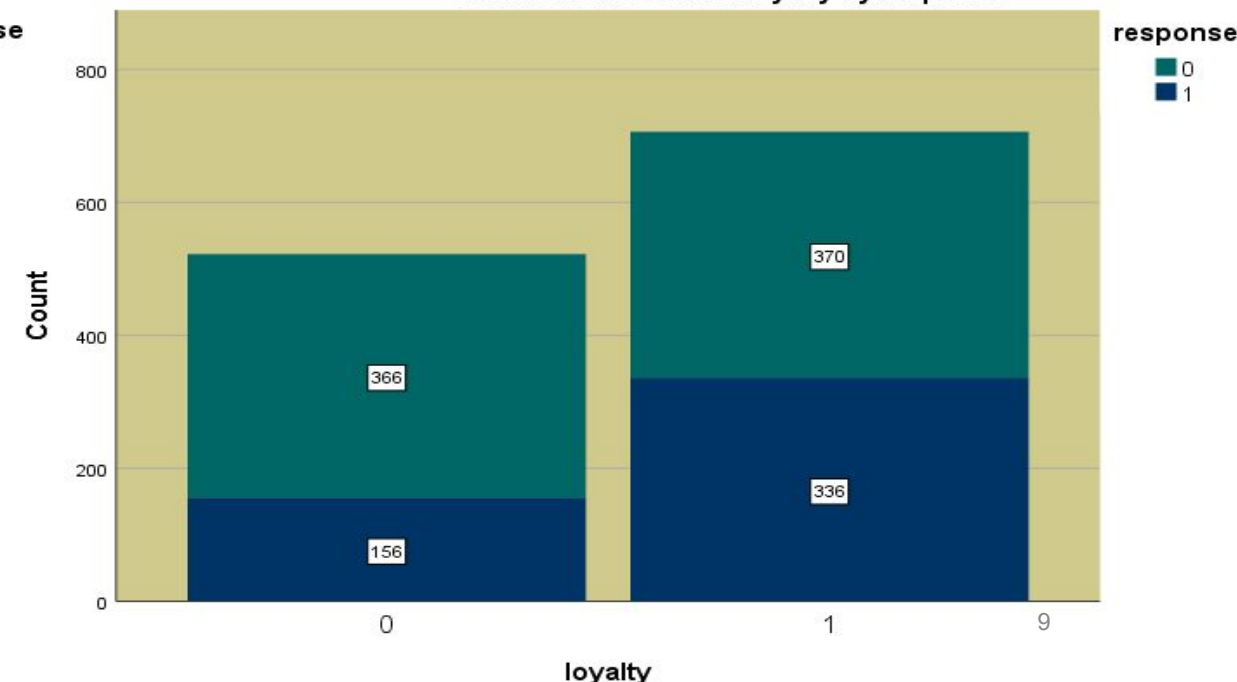
Stacked Bar Count of rewards by response



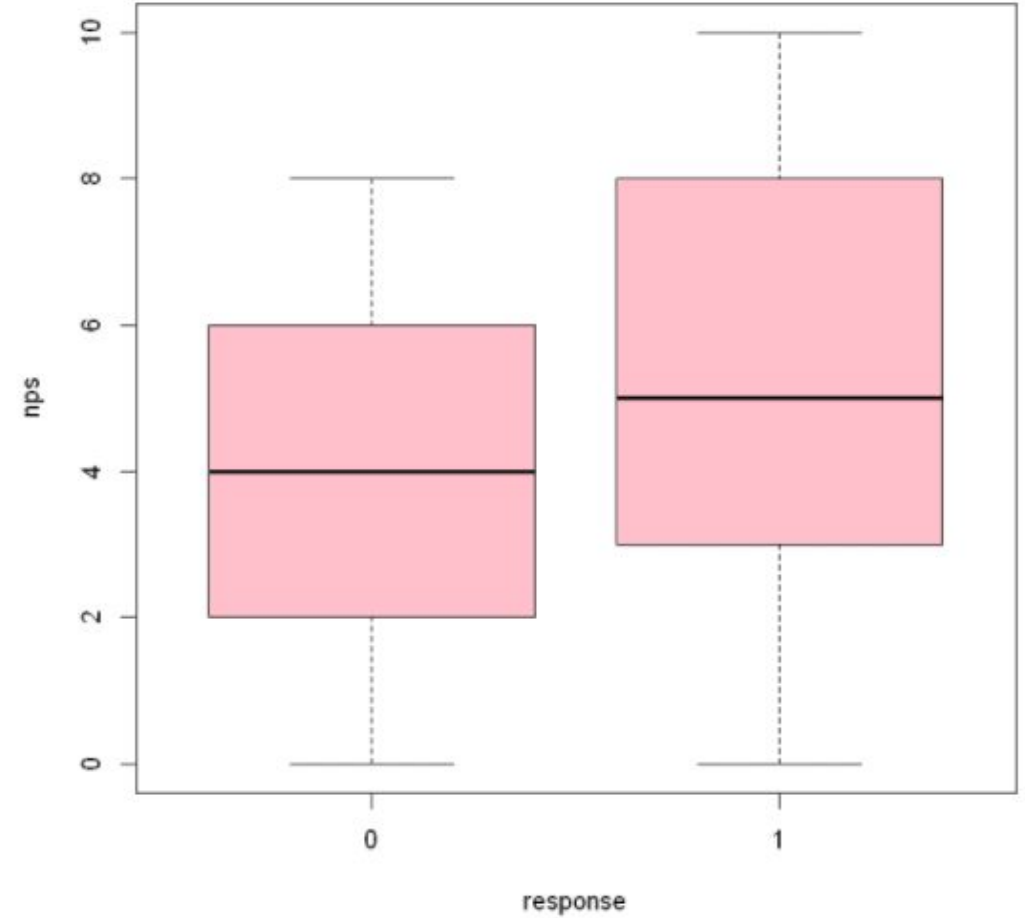
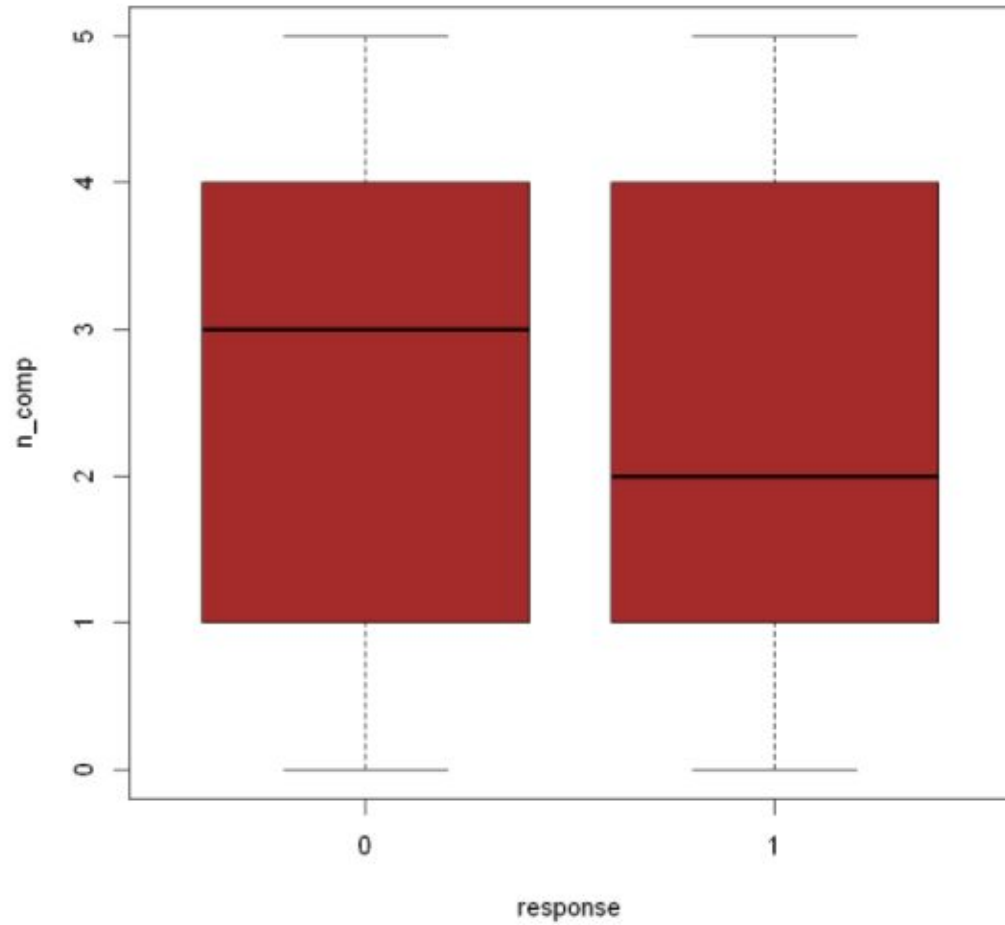
Stacked Bar Count of Region by response



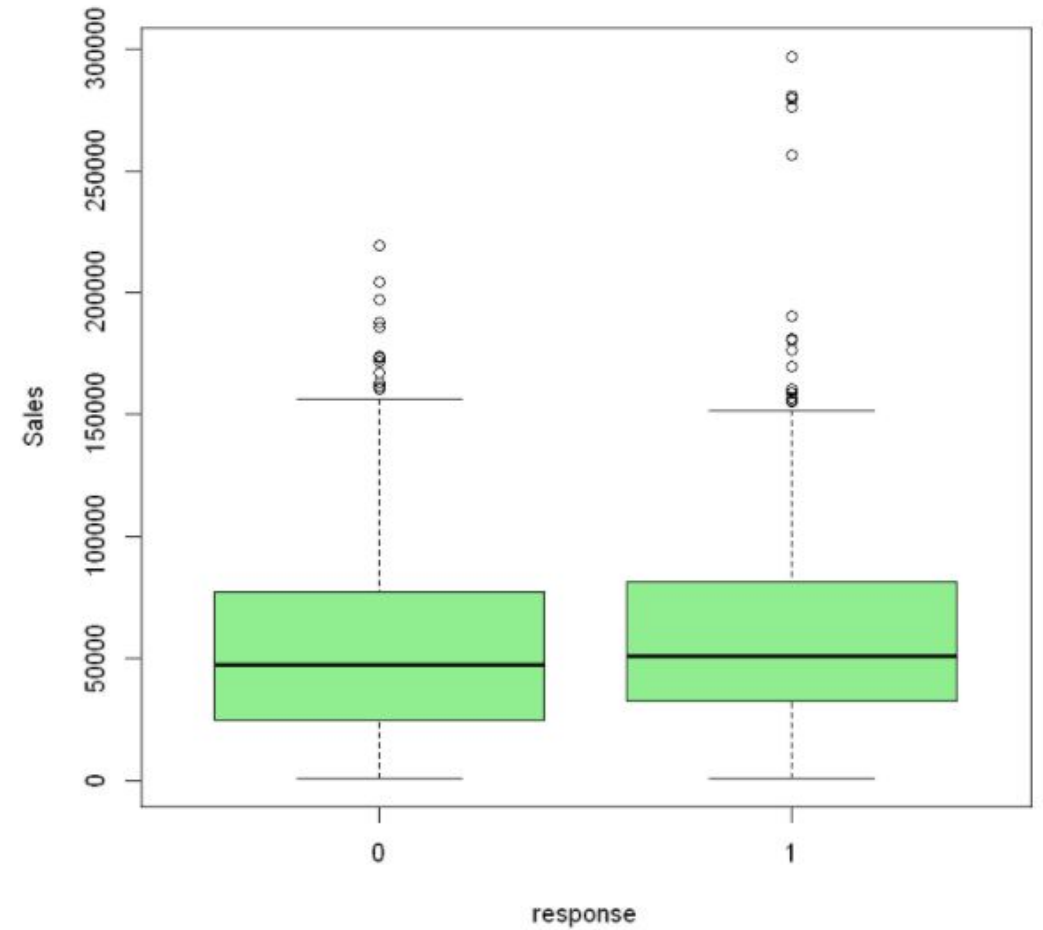
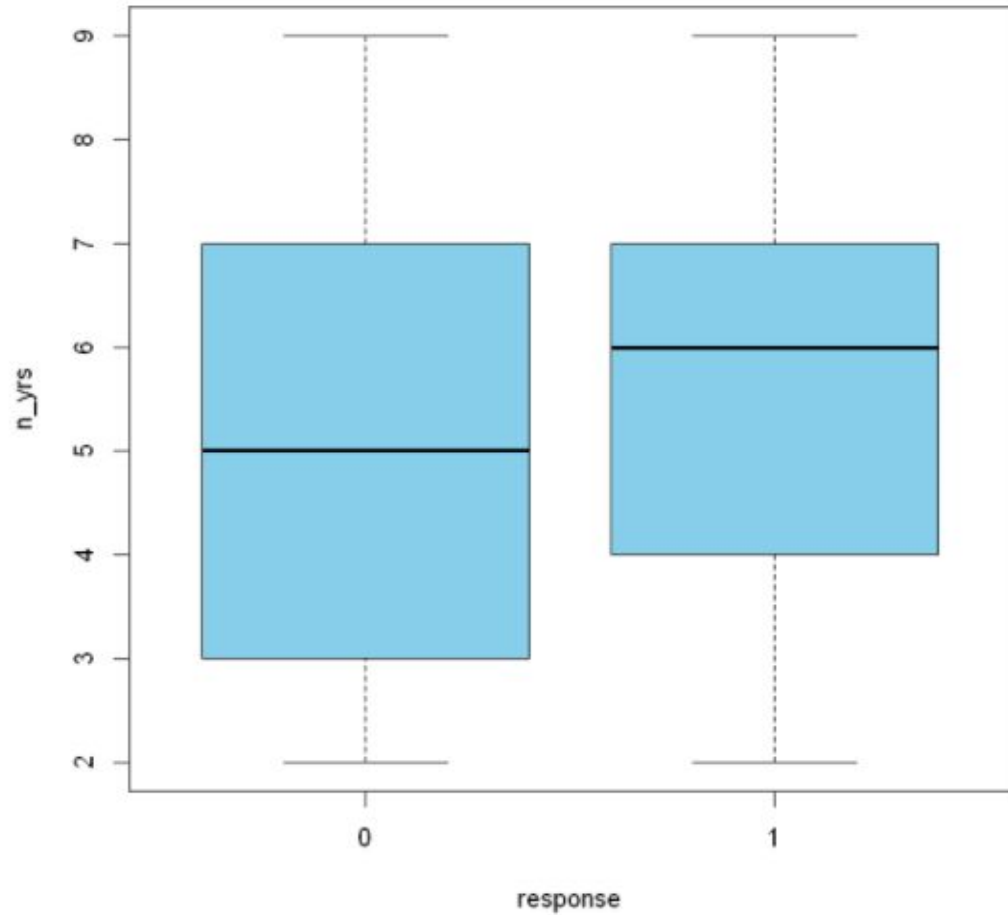
Stacked Bar Count of loyalty by response

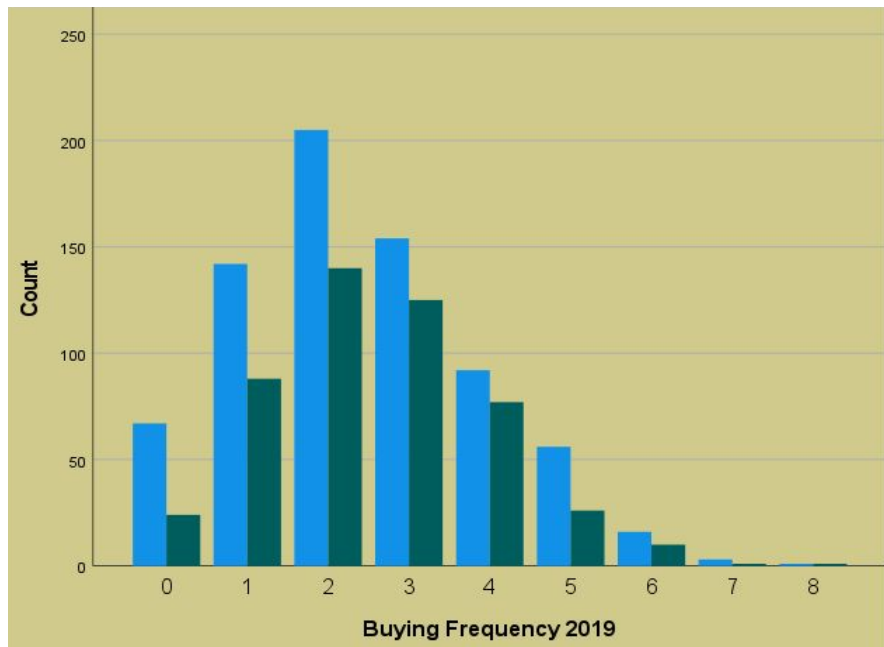


# VISUALIZATION- COMPLAINTS AND NPS

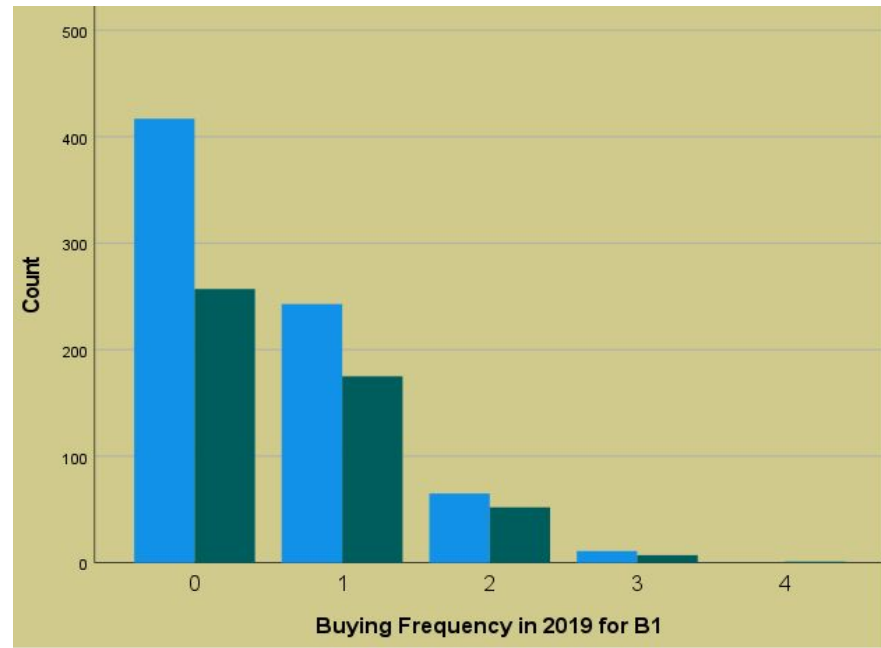


# VISUALIZATION- NO. OF YEARS AND SALES

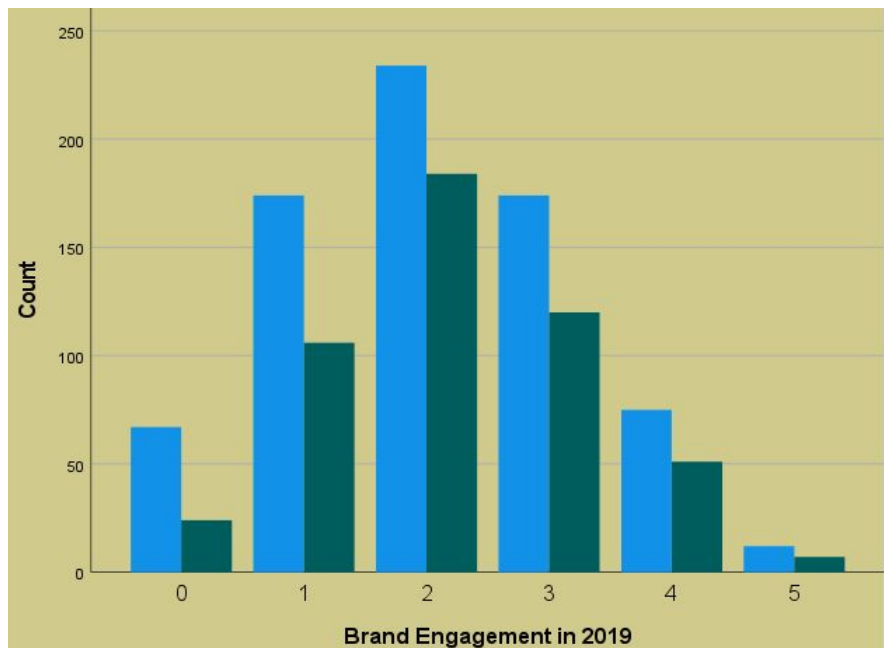




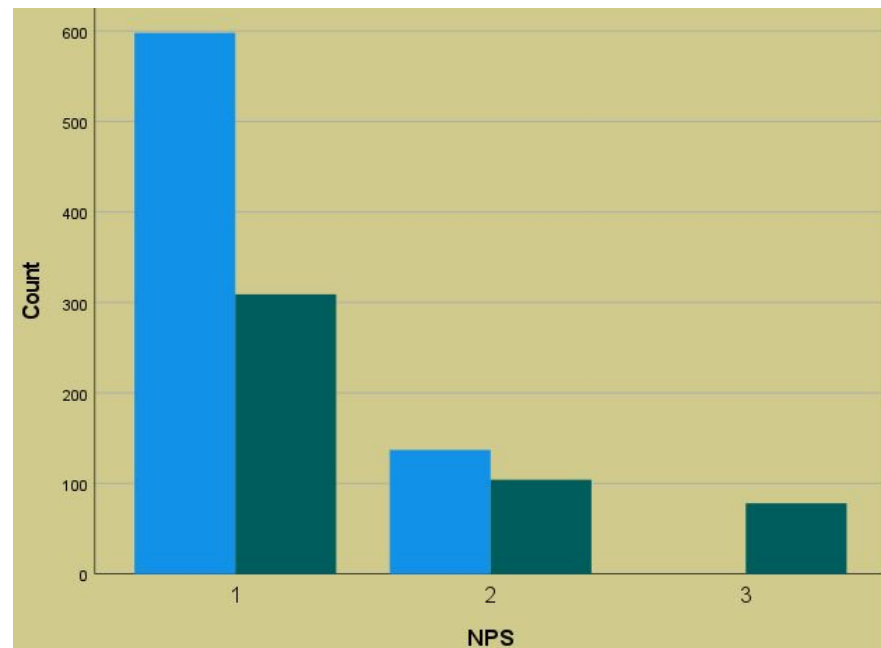
response  
0  
1



response  
0  
1

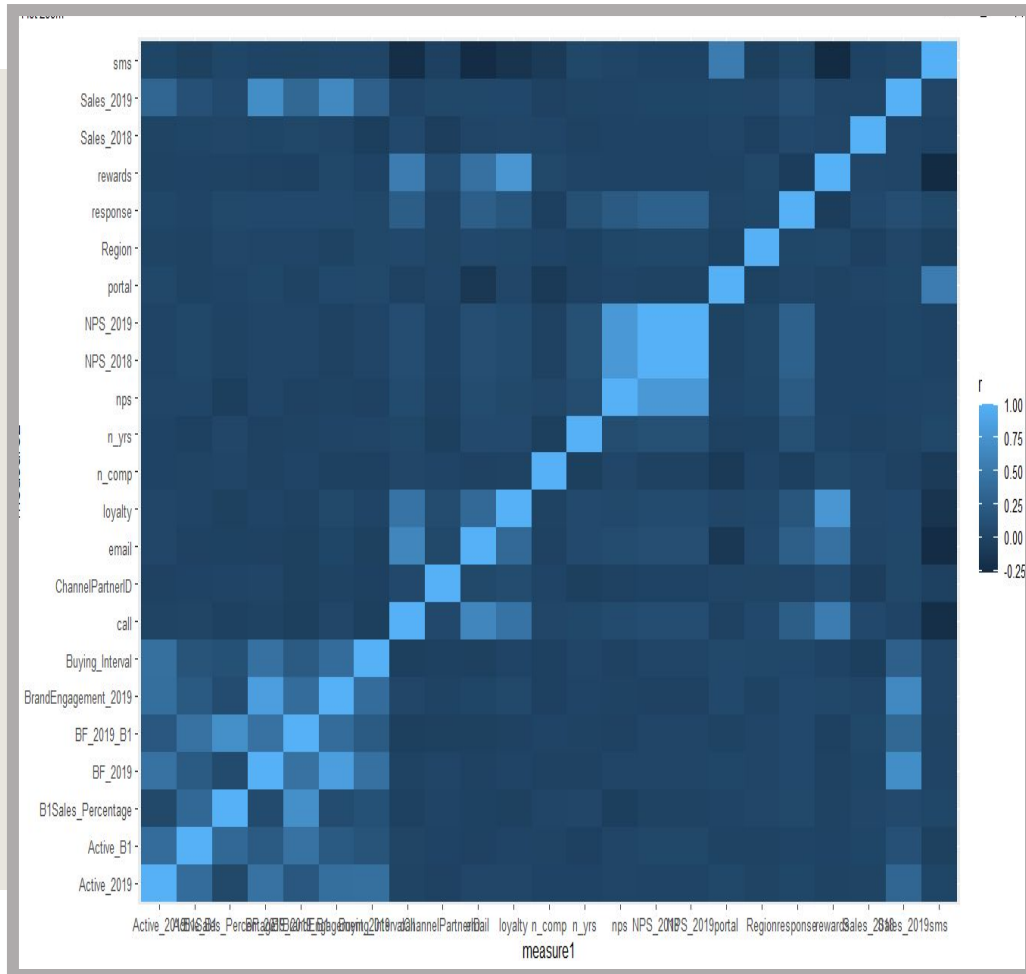


response  
0  
1



response  
0  
1

# VISUALIZATION



**HEATMAP**

Correlation heatmap is graphical representation of correlation matrix representing correlation between different variables.

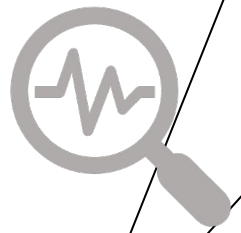
The value of correlation can take any values from -1 to 1.

It can be inferred that there is a high correlation between SMS and several other variables, so we will remove SMS from the predictive modeling.



## MODELING:

- Logistic regression is used to describe data and to explain the relationship between one dependent binary variable(dichotomous) and one or more nominal, ordinal, interval or ratio-level independent variables.
- Here the dependent variable is responses- 1: Yes, 0: No



# INFERENCE:

Significant Variables:
Email
Call
Loyalty
Rewards
Sales 2019- derived variable
NPS- derived variable

VIF:
All the variables $< 5$ and hence they are between normal range.
<b>NO MULTICOLLINEARITY</b>





# CONCLUSION 1

## ChannelPartnerID

1	10048
2	10073
3	10653
4	10819
5	10831
6	10836

## POSITIVE RESPONSE AND TARGET

Here's a list of the Channel Partners that responded positively for the launch of the new product.

# CONCLUSION 2

## UNDERSTANDING CONSUMER BEHAVIOR

Channel Partners who have a loyalty membership and redeem the rewards more, are more prone to have a positive response and are more willing to support the launch of the new product by the company.

Improve relationship with the Channel Partners: Decreased number of complaints, better reward system, Part payment, extra credit, balance.

End consumers love the flavor of the product. Use it in various recipes.

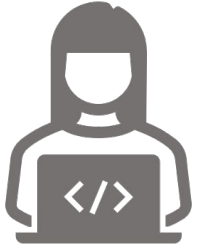
## CONCLUSION 3

email	sms	call	count
1	0	3	1
1	1	0	18
1	1	1	138
1	1	2	6
1	1	3	1

### SCIENTIFIC METHOD OF COMMUNICATION

Here's an analysis on which type of communication worked well for the company and what they should continue to pursue and have a standard means of communication with the Channel Partners.

Call=1, SMS=1, Email=1



## CONCLUSION:

- According to the pre-covid data provided by the company, it sought recommendation on dealing with the pandemic situation with new marketing strategies complementing the pandemic situation.
- The main strategy which we came up with to immediately deal with the pandemic was to connect with the end consumers directly and also simultaneously focus on improving relationship with the existing Channel Partners.

# STRATEGY

- SEO/ SEM: Search Engine Optimization/Marketing
- Website: Create a website and connect with the consumers directly.
- SMM: Social Media networks like Facebook, Instagram, Twitter, Youtube, and LinkedIn.

# CASE STUDY- COUNTRY BEAN



- India's 1<sup>st</sup> flavoured coffee brand
- D2C, SEO, SEM, SMM
- >2Lakh customers
- “The Internet has made it possible to run a national or even a global business from your bedroom”

## STRATEGY

- Instagram presence
- Stories, Reels, Memes



## ACKNOWLEDGEMENT

This project would not have been possible without the guidance of our Marketing professor, Aditya Nagaraja Sir and Vinayak Deshpande sir.

Thank you to both the mentors.

We would like to thank NMIMS deemed to be university for providing us with this opportunity.

# THANK YOU!

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