



Marketing Analytics

- BIA 672

Eat Smart and Move More



Content

Summary

Who are we?

Vision

Data Gathering and Understanding

Data Preparation

Our Analysis Strategy - Segmentation Analysis

Placement and Promotion

Future Scope

Summary

The data was obtained from U.S Government's Health Department, Centre of Disease control and prevention.

This data was cleaned according to the attributes that aligned according to our needs to make various clusters with regards to gender, income, age group.

We used the procedure Fastclus and sgplot etc which helped us narrow down the probable locations, and categories based on the gender, age and income which we leveraged in the making of our analysis.

To these clusters, we applied our marketing strategies in order to expand our customer base and increase potential growth in the future.

Who are we?

Our Consultant group is a consulting and analytics firm at a nascent stage trying to make its way to the top by giving tough competition to the existing counterparts.

Our Goal is to be a mediator between Companies like Blink, Planet fitness and citizens of US suffering from health issues like obesity, etc.

We believe that in order to convince customers to go for fitness alternatives, we need to have a competitive edge.

Vision

Use robust marketing strategies efficiently to provide better health initiatives.

Make people healthy and provide solutions.

Keep updating our data to provide newer strategies according to states.

Partner with numerous companies for bringing various things to platter.

Help people in need as quickly as possible with the best service.

Use different convenient channels to reach out to the market.

About Data?

This data was acquired from the U.S Government's Health Department, Centre of Disease control and prevention.

There are total 29 variables and around 48772 entries.

We will be using following 8 variables:

| Variable | Variable Description |
|--------------|---------------------------------|
| LocationDesc | Gave us the name of location |
| Class | categorized into two types |
| Data_value | has value similar to confidence |
| Age_years_ | age of that entity |
| Education | education of that entity |
| Income | Income of that entity |
| Ethnicity | Race/ Ethnicity of that entity |
| Gender | Male or Female |

Data Preparation

- First, we performed cleaning of data i.e.
 - Removed outliers
 - Removed Missing values
- Performed Groups of variables.

| Age_years | No |
|--------------|----|
| 18 - 34 | 1 |
| 35 - 54 | 2 |
| 54 and above | 3 |

| Income | No. |
|-------------------|-----|
| Less than 25000\$ | 1 |
| 25000\$ - 50000\$ | 2 |
| 50000\$ - 75000\$ | 3 |
| More than 75000\$ | 4 |

Segmentation Analysis

We formed 4 clusters of states on east coast.

| Cluster Summary | | | | | | |
|-----------------|-----------|-------------------|---|--------------------|-----------------|---------------------------------------|
| Cluster | Frequency | RMS Std Deviation | Maximum Distance from Seed to Observation | Radius Exceeded | Nearest Cluster | Distance Between Cluster Centroids |
| 1 | 512 | 0.4650 | 2.2926 | | 3 | 2.3159 |
| 2 | 521 | 0.2126 | 1.0329 | | 1 | 2.9663 |
| 3 | 837 | 0.6315 | 2.0466 | | 4 | 2.1746 |
| 4 | 518 | 0.3495 | 2.1342 | | 3 | 2.1746 |

Cluster Means

Consider cluster 4 :

Gender = Female

Education = Less than high school

Ethnicity = Hispanic

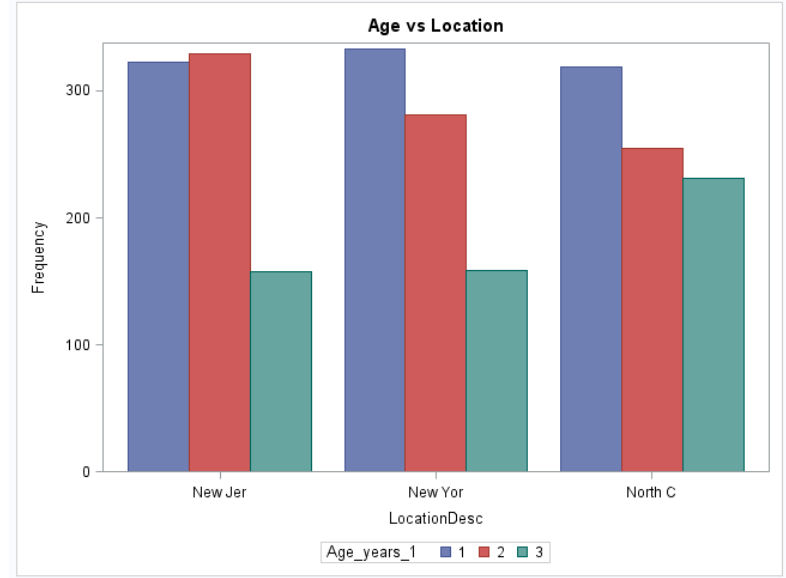
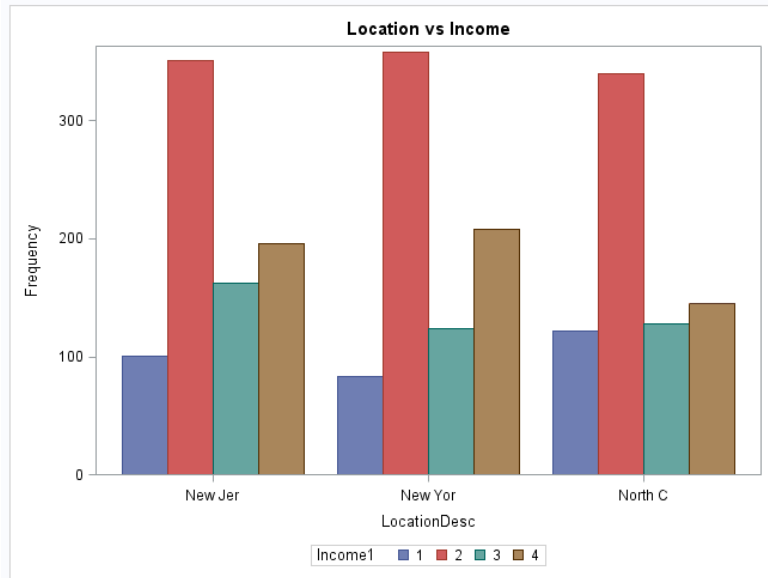
Age = 34 - 54

Income = 25K - 50K \$

Class = less physical activity

| Cluster Means | | | | | | |
|---------------|-------------|-------------|-----------------|-------------|-------------|-------------|
| Cluster | Gender1 | Education1 | Race_Ethnicity1 | Age_years_1 | Income1 | class1 |
| 1 | 2.000000000 | 3.941406250 | 2.587890625 | 2.191406250 | 3.220703125 | 1.355468750 |
| 2 | 1.000000000 | 2.000000000 | 4.000000000 | 1.000000000 | 3.971209213 | 1.585412668 |
| 3 | 1.201911589 | 2.502986858 | 2.126642772 | 2.537634409 | 1.710872162 | 1.567502987 |
| 4 | 1.864864865 | 1.000000000 | 2.146718147 | 1.123552124 | 1.876447876 | 1.513513514 |

Frequency Distribution



Marketing Strategy (East coast)

DIFFERENT AGE GROUP

18-34 : Introduction of fitbits which are economical, Newer energy drinks, healthy meals , Introduction of high intensity physical activity

34-54 : Introduction of Moderate Intensity Physical activity, Introduction of nutrition food

54+ : Nutrition Surveillance System, Health groups etc

DIFFERENT INCOME

less than 25k : Encourage government to organize free health sessions like Yoga,
25k to 50 : Approaching gyms for reducing membership cost, Introduction of new gyms
50k and above : Personal Trainers, Nutrition rich diet, Encouraging them for stress free sessions.

- Government can introduce programs, initiatives or activities that are considered leading edge.
- They can post awareness on social media like facebook, twitter , instagram etc.

New York cluster

In the NY cluster, we acquired the following results:

| Cluster Means | | | | | | |
|---------------|-------------|-------------|-----------------|-------------|-------------|----------|
| Cluster | Gender1 | Education1 | Race_Ethnicity1 | Age_years_1 | Income1 | class1 |
| 1 | 1 | 1.983050847 | 1.000000122 | 1 | 3.966101695 | 1.548023 |
| 2 | 1.164750958 | 2.478927203 | 3.168582375 | 2.498084291 | 1.762452107 | 1.574713 |
| 3 | 1.881355932 | 1 | 1.118644068 | 1.118644068 | 2.881355932 | 1.508475 |
| 4 | 2 | 3.936708861 | 2.601265823 | 2.183544304 | 3.215189873 | 1.379747 |

In general, these are the overall observations

| Gender | Education | Race_ethnicity | Age_years_ | Income | Class |
|---------------|----------------------|------------------|------------|----------------------|------------------------|
| Male / Female | High school Graduate | Asian / American | 18 - 54 | 50K - 75K \$ & above | Less Physical activity |

Marketing Strategy(NY)

Target Age Group(18-54)

NY has a large number of individuals living in a fast paced, high stress environment.

Considering the NY cluster, we can target the age group mentioned in this cluster by selling a strategy that offers a combination of various healthy alternatives.

- Promotions on Fitbit and other fitness tracking devices
- Propose mixed workout plans like Zumba, crossfit and other forms of workouts apart from the traditional options.
- Increase the availability of Citi bikes across the city
- Offers on health meals and dietary supplements

North Carolina Cluster

In the NC cluster, we acquired the following results:

| Cluster Means | | | | | | |
|---------------|-------------|-------------|-----------------|-------------|-------------|----------|
| Cluster | Gender1 | Education1 | Race_Ethnicity1 | Age_years_1 | Income1 | class1 |
| 1 | 1.010526316 | 2.38245614 | 1.249473684 | 2.47629571 | 3.185964912 | 1.694737 |
| 2 | 1.636103152 | 1.607449857 | 1.727793696 | 2.106017192 | 1.650429799 | 1.469914 |
| 3 | 2.000000518 | 3.964912281 | 2.444444444 | 2.269005848 | 3.286549708 | 1.309942 |

In general, these are the overall observations

| Gender | Education | Race_ethnicity | Age_years_ | Income | Class |
|--------|----------------------|---------------------|------------|--------------|-------|
| Female | high school graduate | American / Hispanic | 34 - 54 | 25K - 75K \$ | obese |
| | | | | | |

Marketing Strategy(NC)

Target Age Group(34-54)

This cluster in North Carolina has a large number of middle aged to elder aged individuals. Though their income group is lesser as compared to NY, so these individuals will prefer better and healthier food options at a cheaper rate.

Reducing the cost and advocating the health benefits of eating right needs to be expanded. Nutritionists and Trainers who offer their services at a lower price will encourage people to get fit.

Governments can introduce free physical activity plans for individuals and also motivate them to choose healthier alternatives.

Increase nutritional options at fast food chains and cater them at a cheaper rate to encourage healthier options.

New Jersey Cluster

| Cluster Means | | | | | | |
|---------------|-------------|-------------|-----------------|-------------|-------------|-------------|
| Cluster | Gender1 | Education1 | Race_Ethnicity1 | Age_years_1 | Income1 | class1 |
| 1 | 2 | 4 | 2.738636364 | 2.130681818 | 3.130681818 | 1.369318182 |
| 2 | 1.012195122 | 2.43902439 | 3.533536585 | 1.454268293 | 3.082317073 | 1.448780488 |
| 3 | 1.640522876 | 1.583660131 | 1.816993464 | 1.970588235 | 1.669934641 | 1.558823529 |

In general, these are the overall observations

| Gender | Education | Race_ethnicity | Age_years_ | Income | Class |
|--------|------------------|------------------|------------|--------------|-------|
| Female | College Graduate | Hispanic / Asian | 18 - 54 | \$ 50K - 75K | Obese |

Marketing Strategy (NJ)

Target Audience : We would recommend that the organizations target the customer segment on the demographic basis of age. The segmentation would be: 18-34 and 35-54

Pricing : The pricing should be different for different age groups, for ex: Protein shakes are interesting at 18 - 34, but 35-55 age group would like to build core strength for daily tasks & longevity

- What our clients bring to our customers will be: a plethora of tailormade offerings for their health needs, and efficient customer service. One size doesn't fit all, and customers want a more personal approach, especially health & wellbeing matters
- Cross selling, Bundle Pricing Packs, Training Modules, Digital Marketing (B2B, B2C)

Analysis(All 3 states)

After performing individual analysis, we will focus on the age group 35-54 and contrast them across the three states:

| Location | Gender | Education | Race_ethnicity | Income | Class |
|----------------|--------|----------------------|-----------------|------------------|------------------------|
| New York | Male | High school graduate | America / other | \$ 75K and above | Less physical activity |
| New Jersey | Female | College graduate | Hispanic/ Asian | \$ 50k - 75k | Obese |
| North Carolina | Female | High school grad | Hispanic | \$ 25k - 50k | Obese |

Conclusion

A specialized approach in a target customer segment goes a long way to help improve consumer impact.

This helps drive down costs and puts the customer first on an organizational priority, and customers appreciate that!

Broad spectrum strategies are passe' especially in healthcare.

Our analysis about the physical activity of the people of USA found the target audience to offer recommendations for potential untapped markets.

With the analysis stated, we observe that targeting these states will be the best way forward for our clients.

And we will recommend that this is implemented for best customer outreach.

Future Scope

Essentially we would want there to be a targeted strategy for every age bracket in the demographic to enhance customer outreach.

The next step in this would be to implement algorithm based learning mechanisms, utilizing historic customer feedback as target data.

This would spur further growth and innovation in the healthcare segment, essentially setting high standards for competing players.

In the next implementation, with a growth of healthcare devices and supplies, we could be looking at a very robust customer share based on a “customer first” approach.

Thank You!!