UNDERSTANDING TNBA DATA REPORT

BREAKDOWN OF DATA FOR TNBA SPONSORSHIP THE OLDEST BOWLING CLUB IN U.S.

**The Process:**

1. As you can see from the first page entitled Waterfall Report, the TNBA sent over their database to our IT department via Excel spreadsheet.  Their data featured 25,920 active members.  We then analyzed these 25,920 members and did what we call a ***cross append*** of every customer’s demographic data.  All we need is a customer’s (***name and address***), or (***name and mobile number)***, to make sure the person in the TNBA database, (such as Steve Schroeder), is the same Steve Schroeder who lives in Cumming, GA.  and is a TNBA member.
2. We were able to match 75% of this data with 100% statistical certainty, or 16,000 customers of the TNBA.
3. Although there are 1000s of Steve Schroeder’s in the U.S., only one Steve Schroeder lives at a certain address in Cumming, GA.  Only one Steve Schroeder has a certain mobile phone number assigned to his name.  Statistical certainty is important for sponsors to know the data is accurate.
4. Once we statistically verify each individual customer and know we have the right Steve Schroeder, the one who lives in Cumming, GA., we then pull all of Steve Schroeder’s data from years of behavior and activity.
5. We then take Steve Schroeder’s data profile (using 19 unique criteria) and compile a ***waterfall report,*** to find out what makes Steve Schroeder a TNBA member?  In other words, what type of propensity does Steve have which is similar to other TNBA members as to why Steve would join the TNBA.
6. In other words, what characteristics does Steve show, which gives him a propensity to become a TNBA member?  To find this out, we take all 25,920 members (or 16,000 members with certain match) and compare every customer.  We then compare the data from these 16,000 members to find out what characteristics they have in common.
7. Once we know the common denominators for each TNBA member, we then compare these characteristics to the entire population (by State and County), to find out the most candidate who is not a current TNBA member, but shows a high propensity to become a TNBA member.

1. In other words, what if a certain customer met all the ideal criteria of the ideal TNBA customer, but was not a TNBA customer?  This person is much more likely to become a TNBA member than a person without these characteristics.

1. This is like what you have seen with Amazon.com.  When a person purchases a certain item, they then show a statistical propensity to purchase another item.  Amazon tracks what other items people purchase after purchasing a select item, and then suggest this item as a possibility.  Why?  A number of people seemed to purchase Y, after they purchased X, so when a customer purchases X, they might have similar traits to 1000s of other people who purchased Y after purchasing X.  The likelihood of a person purchasing Y, after they purchase X, is much greater than the entire universe of people purchasing Y.  So, the purchase of X triggers a propensity score for the customer to purchase Y.

1. As you can imagine, this propensity score is highly valuable to those who are selling Y, since the purchase of X represents a strong statistical likelihood to purchase Y.  The Y people would love to know who purchases X, and they would pay handsomely for this data.  We suggest that you don’t sell it to them, but instead use a different method to generate joint business synergy marketing benefits.  But, the choice is yours.
2. We then take behavioral data, emotional data, demographic data, and a number of other key data sets, and compare all 16,000 members.  ***Fascinating research***, the results are below.
3. We then come up with the ideal TNBA customer.
4. ***In the case of the TNBA, we had customers from 38 different States.  The total population of these States happened to be 103,288,734.***
5. We then take the ideal TNBA customer profile (you see below), and cross reference this profile with all 103,288,734 people.
6. We assign a ‘propensity score’ to all the non TNBA members in this 103+ million ‘universe’ of potential customers.
7. We use a custom data algorithm for each of the 103,288,734 people and score them on a simple 1-10 basis.  1 is very likely to become a TNBA customer, 10 is least likely to become a TNBA customer.
8. Rather than advertising to all 100+million, we pull out the top 20% of the population (or those with scores of 1 and 2).  We avoid spending money or communicating with those scoring 3-10.  This saves us a lot of money and gives us much higher success.

1. Just like Amazon.com, (but stronger), we have amazing research that shows us the likelihood of someone to respond, might as well focus on the low hanging fruit.

1. We can then ‘cherry pick’ these top 20% people, and communicate with them digitally, or send a direct mail piece.  We might email them or communicate in any number of ways.  Digital combined with direct mail seems to be the ideal strategy for many, especially when their propensity to respond to direct mail is so high, (such as with TNBA members, noted below).
2. Since we are not advertising to the entire universe of people (ones who are NOT likely to respond), our advertising success goes way up and our advertising budget goes way down.

Amazing stuff.  Very few companies can perform this type of service, and it’s normally quite expensive.  ReThink bowling offers this remarkable analysis for every bowling center at no additional cost.  ***We also provide this service (free of charge), for business owners who support their local center with items, special prices, or membership benefits, on behalf of the bowling center.***

**Here is the ideal TNBA customer, we can do the same for your database.**

1. **They live in the East/North/Central region of the U.S or the South Atlantic area of the U.S.**
2. **The top county is Cook, IL.  We have listed the top 10 counties for reference.**
3. **Their ideal age is 45-74**
4. **They are married with both male and female present in the house with children.**
5. **61% are males showing a slightly higher propensity for male’s vs females**
6. **Most of them are married, but very close to single people who have lost a spouse**
7. **Most are African American with Caucasian a distant second place**
8. **Their income is above average $50,000 - $124,999.  Above $125k, there is a drop-off**
9. **They have what is called D4-D8 wealth rating showing stocks and real estate**
10. **They are most likely to have some college education but not graduate from college**
11. **They are very likely to have children living in the household**
12. **1 child was the highest score, but all the scores were high, even those with 4+ children**
13. **Most customers have resided in the area for at least 11+ years**
14. **Homeowners are more likely to be customers**
15. **Single Family Home Ownership is most likely**
16. **The Median assessed home value was 100k-150k, that’s assessed value, not sale value.**
17. **TNBA customers are very likely to respond to direct mail of any type**
18. **TNBA members love to donate to Health and Wellness as their #1 priority**
19. **TNBA members have strong interests across the board.  They love to travel and they spend money on beauty and personal care as their top two preferences.**
20. **Their top consumer vector score indicates**
21. **Suburban Household**
22. **Male decision maker**
23. **Baby Boomer**
24. **High Income**
25. **Both male and female in the house**
26. **Children present**
27. **The top GEO vector score or the most likely group to become new members**
28. **Urban dwellers**
29. **They are in the ‘Winter’ portion of life**
30. **Middle Income**
31. **Families**

**There are 103,288,734 people residing in these States where TNBA members currently live.  We applied our scoring algorithm using the datasets above and have the following results**

1. **20,657,748 of the 103,288,734 are the ideal targets for new membership**
2. **6,197,234 we have complete cookie append information, so we are certain of their mobile device, computer, tablet, etc.  We can communicate with them at any time with digital message, coupon, invitation, etc.  We can also send them a direct mail piece if preferred since they are so likely to respond to direct mail.**
3. **12,394,649 people we have Geo-Location supplement.  This means it’s possible that a person in their household might receive the message as compared to one person.**

 **Further Breakdown of the Report**

**Waterfall Report**:  103,288,734 represents the total number of people in the customer footprint of the TNBA.  For example, when viewing the ‘heat map’ page in the report, any State where TNBA members happen to reside, they are indicated with color code mapping.  When we see States (such as Oregon) which don’t have any color coding, that means there are no TNBA members who live in those States.  Using Oregon as an example, there are no TNBA customers who live in Oregon.  This means we did not use any data from the State of Oregon.

We can still market to people in Oregon, but there might be better areas to focus on getting new members.   As you will read below, it’s very easy to pick out the ideal TNBA customer demographic and market to those people.   Once we have an ideal profile, we can pull out ideal non-customers from any State.  We simply decided to focus our initial reports in States where members already lived.

***Our software already identified 18,591,973 people who fall into the top 20% of the U.S.,*** who are most likely to become TNBA members.  This means we have millions of people, (who statistically match the ideal TNBA customer), but are NOT TNBA customers.

***We can communicate with these 18,591,973 people directly to their mobile device***.  When these people turn on their computer, phone, or tablet, we can advertise to them with a TNBA invitation and/or membership.  We don’t need to hit all these people at the same time however.

After reading the report, the best two states for new member acquisition happen to be Ohio and Michigan.   The best ***counties***to focus communication are

1. Summit, OH
2. Hamilton, OH
3. Cuyahoga, OH
4. Wayne, MI
5. ***See report for actual numbers***

We can focus on these 4 counties, pull out the top 20% most likely customers, and send an invitation for them to join the TNBA.  We can do this free of charge for the TNBA by leveraging our findings with other non-compete verticals.

For example, we also found out these customers are very interested in finding alternative health options to alleviate pain.  There could be an ideal opportunity to join hands with a clinic in Michigan and/or Ohio to introduce these customers to alternative health options.  Many are not familiar with class 4 laser, stem cell regenerative medicine, and other new technologies.

The reason for this statistical sweet spot with health and sports, is due to the higher age demographic of TNBA members.  For open play bowlers, the ideal age was 18-24.  For competitive or league bowlers, the ideal age was 45-74, that’s a completely new demographic interested in staying healthy, so they can perform activities much longer without pain.

1. Total client count 25,920 is how many customers the TNBA sent over for analysis
2. 24,859 is the total count of addresses included in their database
3. 21,407 are the unique records since several thousand records were from the same household.
4. 16,000 (just a coincidence that the number landed exactly on 16,000) were the top records for matching with statistical certainty.
5. 75% represents the percentage of records pulled out of the TNBA database for accurate analysis compared to 103,288,734, or the total customer footprint analyzed in this report.

**Digital Ad Targeting Page**

1. We applied a predictive scoring algorithm of the top 20% of these 103,288,734 customers to find the ones most likely to respond but are currently not members of the TNBA.
2. 20,657,748 represents how many customers of the 103,288,734 we would target for the highest success.
3. 6,197,324 represents the percentage of these 20,657,748 we have complete cookie tracking with 100% accuracy.  This means we know the IP address of their phone, tablet, computer, etc.   Highly accurate, extremely dependable.
4. 12,394,649 is the remainder of the 20,657,748 where we have IP Geo Location Supplement.  This means we have specific household information but someone in the house might use the device.  In other words, if we communicate with these people, it’s possible we might reach the spouse or one of the children rather than the specific client should we send a digital ad or coupon to their mobile device.
5. Total of Digital Ad Targets 18,591,973 is the total of the above two categories for ideal individuals and households we should send a digital ad to their mobile device inviting them to be members of the TNBA.

**Heat Map Report:**

1. Shows geographical representation of where customers live in the U.S.

**Region**:  This is the start of the top 19 criteria, which are most likely to determine advertising success.  We will explain this section in a little more detail, since every section following, uses the same format.  Once we understand the process below for the REGION section, we can decipher the rest of the report very easily.

1. The left side of the report represents the percentage of customer distribution vs the entire universe of 103,288,734.  In other words, using the REGION page, here is the breakdown.
2. The East/North/Central section represents ***Illinois, Indiana, Ohio, Michigan, and Wisconsin.*** Notice this is a key region for Ohio and Michigan, since both States are present in these ‘data’ areas and the group is only 5 states in total.
3. 24% of the TNBA database comes from these States.
4. 16% of the 103,288,734 come from these States.
5. We then divide the customers of TNBA by the total number of potential customers, and multiply by 100 to come up with the 152 score (Green bar to the right).
6. This 152 score, means that customers who live in these States, are 1.52X more likely to be a TNBA member.
7. This represents a statistical sweet spot for advertising, and verifies our most successful pursuits will be to focus on Ohio and Michigan.
8. In other words, we now have verified statistical precision showing Ohio and Michigan as the two best States for the TNBA to advertise for new members.
9. Who does this benefit? Ohio and Michigan of course [Symbol]  Once we show statistical proof, it allows us to secure sponsorship money, advertising money, business synergy partners, additional advertising support, other benefits, etc.
10. The green bars on the right-hand side of the page, (***represent green for GO***), or positive areas to focus our advertising efforts.  We can see this explained in greater detail at the bottom of the Waterfall report page.
11. These types of findings help save companies significant adverting fees while producing greater results at the same time.  These findings are often the opposite of what many executives in marketing might believe.
12. In other words, it seems as if Ohio and Michigan are saturated, maybe we should not focus on Ohio or Michigan.  But, this is where predictive analytics help make proper decisions.  The opposite is true.  Since we are only representing 24% of 26,000 (actual TNBA customers), but referencing 16% of 103,288,734 (the universe percent), this shows us that Michigan and Ohio are the most desirous places to advertise.
13. The other highly desired region, (which has the same score), is the South Atlantic division, consisting of Delaware, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, DC, West Virginia.  This region has the same score as our East/North/Central region where Ohio and Michigan are located.
14. One reason why Ohio and Michigan would be preferred over the other region, is due to the County report (discussed next).  Plus, the Ohio and Michigan region has fewer states (in their data group), giving us a better test case to secure new members.
15. This gives us even more statistical precision to verify Ohio and Michigan as the two key states for TNBA advertising or promotion.  Yes, we can test this further and verify, but that’s what the evidence is pointing to in advance, thus predictive analytics.
16. ***Every region of the U.S. is listed in this report page.  Ohio and Michigan are two key states inside a big demographic of the heartland which sponsors are looking to tap.  This is why Donald Trump visited both Ohio and Michigan recently.***
17. ***This is also why these two States play such a huge role in elections.  These two States represent the heartland with statistical precision, and open numerous strategies for sponsors moving forward.***
18. ***When we control this type of data, bowling will be the first call for every election moving forward.  That’s called using leverage to help an industry***[Symbol]
19. Look for high green bars throughout the report which help us indicate the best areas to focus our efforts.  When the red bar exceeds the black bar, this means a higher percentage of our customers come from this area, and we are more likely to succeed by focusing on these areas.
20. The results get much more interesting as we move forward.  Please continue.

**County:**

1. These are the top 10 counties ***by percentage basis*** of TNBA membership but are listed alphabetically.  In other words, Cook County, IL is the number one county of membership of TNBA.  5% of all members coming from this one county alone.
2. Notice that Prince Georges, MD., has the second the greatest number of TNBA members at 4%, but a virtually non-existent universe number.  Since Prince Georges is such a small county, there is a very small percentage of the universe which lives in Prince Georges, yet 4% of all TNBA members come from Prince Georges, interesting.
3. Why does such a large percentage of TNBA members live in this county?  Good question, we will find out
4. For now, this looks like an ideal place to advertise, but more on this later.
5. **NOTE**:  Remember, these are not the top 10 counties by score, they are the top 10 counties by percentage of members or current customers of the TNBA.
6. As you might be seeing, there is a lot of research, and follow up strategies we can use to make our data even more valuable.  Therefore, it’s called Big Data!

**Age Description – Alternative Health Business Synergy**

1. This represents a totally different demographic than open play bowlers.  With open play bowlers, the highest propensity age group was 18-24-year-old.  With the TNBA, we have a statistical sweet spot for age 45-74.
2. This is another reason why Bowling can be such a great partner, we can hit age groups from every demographic by separating league and open play bowlers.  More than likely, these statistics represent league bowlers as competitive (or tournament) bowlers.  Most league bowlers are also tournament bowlers, or establish an average to bowl in a tournament club.
3. You will notice (later in the document), the #1 donor activity was alternative health.   This is due to research showing that competitive bowling attracts older people.   Many people who join leagues might be retired, or have extra time to join a league, or bowl competitively.  Competitive bowling attracts an older demographic, than casual bowling.   Competitive or league bowling is an ideal partner for alternative health options.
4. Customers in Ohio and Michigan are looking for ways to stay healthy and possibly alleviate pain due to bowling or enhanced by bowling from other ailments.
5. This section of our report reveals the first ever study (like this), for competitive bowling.  We clearly show an ideal partnership for bowling and special treatments to alleviate pain in the shoulders, legs, neck, elbows, and arms.  I am contacting a company in Okemos, Mi, with this research, to see if they would like to discuss strategies based on our findings.  This is how everyone benefits from the proper use of Predictive Analytics and Big Data.  See how easy

 **Household Type**

1. The ideal customer of the TNBA is married with both a male and female present in the house, with children.  We will see later in the document, that those households with 2 children have the highest score, but any married couple, with any number of children, is an ideal candidate for TNBA.
2. Households with children are 1.56X more likely to become a TNBA customer, than those without children.  If we were going to advertise, we would do so to households with children rather than advertise to households without children.
3. Children who participate in sports are 3X more likely to have their parents join the TNBA, so by combining the two findings, we can have much greater success at far less cost.

**Gender**

1. Nothing too significant here with gender, other than ‘males’ have a greater propensity for competitive bowling than open bowling.
2. Marital Status the same…Married is a better target than single people.

**Ethnicity**

1. Notice that over 50% of TNBA members are African American.  More than 39% of TNBA members are Caucasian.   Since the universe of African American population is much smaller than Caucasian, a statistical sweet spot has developed to communicate with African Americans.
2. But, there is another sweet spot for Caucasians who meet the other criteria so both should be focused on with statistical precision.
3. Household Income for the ideal TNBA customer happens to be upper income (from $50,000 - $124,999).   Once we surpass the $124,999 threshold, the success drops off, so we can avoid advertising to people who make more than $124,999 to save money and achieve higher success.
4. Wealth rating like income, shows investment in stocks and real estate as primary drivers of value and most likely TNBA customers.

**Level of Education**

1. Slightly different scores for TNBA than open bowling.  College graduates are not as likely to be members of TNBA than open bowlers.  The ideal customer has some college background but did not graduate from college.   Who might be interested in that data, maybe a college looking to complete education online for TNBA customers?
2. Presence of Children, any children in the household are ideal.  Many partners love kids, so bowling is absolutely a sweet spot for any vertical looking to market to kids through the parents of the household.
3. Number of Children:  Any number of children does not matter.  Whether this be 1 child or 4+ children, the scores are close.   ***We want to advertise TNBA membership to households with kids and offer the kids a companion membership into the center hosting the tournament.  If we do this, we are 4X more likely to secure TNBA membership since we offer outstanding value for the entire family.  This is a strategy we will discuss with TNBA.***
4. Length of residence was 11-15+ years in the same house and neighborhood.  Notice how the length of membership increases step by step.  This could be from awareness.  ***We will suggest a smaller campaign to new move in residents to see if they are unaware of bowling options and invite them to become TNBA members with special benefits for their children.  This could be an amazing formula for success.***
5. Home owners are much more likely to become TNBA members than those who rent.  We will skip all the households where there are renters present, to save advertising dollars.  Or, we will focus on homeowners (in a joint campaign), with a mortgage company.  We will have the mortgage company pay for the mailer, since we paid for the data [Symbol]  That sounds fair to me.
6. Real Estate agents and mortgage companies are not familiar with all the tools we can use to help their business.
7. Single family home ownership is also better than Condo or Mobile Home ownership.
8. Assessed Medium Home Value:  Remember this is ‘assessed’ value not the actual sales value.  The home might be assessed at $50k but sell for 150k.   See results on the page but lower home values are the sweet spot due to strong heartland presence.

**Mail Responders**

1. Bowlers seem to be ideal direct mail responders, and love to respond to multiple direct mail pieces for all kinds of reasons.  When it comes to the TNBA, send an offer via snail mail, and people are likely to respond, especially if the offer has high value.
2. ***This is another reason to invite the kids (of the household) to join a center where TNBA will be holding a tournament***.  ***We can partner with a third company who will pay the advertising expenses for the bowling center and the TNBA***.
3. This is another reason why the TNBA will become more attractive.  Now that the TNBA has access to this type of data (ongoing), bowling centers will want to invite them.  These bowling centers will add prize money to the tournament now that the TNBA can do things for their center which were never possible by the TNBA previous.

**Donor Behavior**

1. Open bowlers showed a much different donor propensity than TNBA, or competitive bowlers.  Open play bowlers had a higher tendency to support animal clinics, or veterinary medicine.  TNBA members or competitive bowlers, are looking to support and donate to healthy alternatives or pain relief.   Children and vets, we also important areas.

**Interests**

1. This is another interesting data set we find with bowlers and golfers.  Those who are active, are especially interested in just about every other category listed on this page.
2. This is outstanding information for bowling to attract many different sponsors.  ***This research will open added money into TNBA tournaments, as well as sponsorship support for bowling centers.  The same is true of golf as well.***

**Community Vectors**

1. Self-explanatory section, and a great page to take note.  Notice the higher penetration index scores.  The highest sweet spot is
2. 13123 (which is described as below)
3. Urban
4. Baby Boomer age
5. Female influences decisions in the house
6. Middle Income
7. Married couple with male present
8. Children in the house
9. You can read the other categories for future analysis.

**Consumer Vectors Description and Application**

1. Explains the vector categories and how they are scored for future communication.  Explains how to use information to develop a more profitable relationship with customers.
2. Geo-Vector breakdown

**Closing Summary**

The TNBA can go through these data reports and pull out a number of valuable insights.  We will help the TNBA close sponsorship deals using this data and updating the data as we proceed.  Once we launch the app, we will have an API for data to be fed in real time to our analytics engines to give the TNBA solutions which many large companies don’t know how to deliver.

NOTE:  This is normally a very expensive pursuit but is supplied free of charge by ReThink bowling to member centers and tournament clubs.  We also provide this free of charge to sponsors and partners who deliver membership value or donations to local centers.

This is a unique and powerful business model that promises to revolutionize the sport of bowling, as well as other verticals which partner with bowling.

Based on TNBA desires, we can drive new customer acquisition, custom membership options, or drive higher engagement to tournaments without any additional cost to TNBA.

We can then track results, keep data fresh, and update the data in real time.  As we spot statistical sweet spots or potential partnerships, we will notify the TNBA to see if they would like to pursue these ideas.

***Steve Schroeder***|Founder|CEO

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