Generation Luxe Analysis Report

**Alert Analytics**

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**May 9, 2019**

Alert Analytics has conducted an analysis of a series of questions related to predicting the likely success of new brands which are being considered as additions to the current product line. Several questions were posed, and we have provided feedback on all of them. Our responses fall into three categories: (1) Questions we can answer using sentiment analysis, (2) Questions that we need further information before we can provide a complete response, and (3) Questions that cannot be answered using sentiment analysis.

For the questions that we deemed to be answerable using sentiment analysis, we have a base means to determine how confident we are in our predictions. First, we will use a centralized system of sentiment analysis in order to provide a consistent assessment and decrease errors. In all cases where we agree to proceed with investigation, sentiment should be tagged as positive, negative, or neutral. Tagging criteria should be consistent.

Next, we will use cross-validation in order to proficiently determine the accuracy of the prediction. This cross-validation process will provide actual metrics, in numeric or percentage form.

## Only add popular brands to the product line. 10 potential new brands will be investigated—we need to narrow the list to the 5 most popular.

**Alert Analytics Response**

Sentiment on the 10 brands of interest can be gathered and tabulated to determine which brands have the most frequent number of sentiments related to popularity. The top five most popular new brands can then be determined.

*Rationale and Approach*

The first sets of words that need to be captured are related to finding the 10 brands that we are assessing.

Next, we look for words related to popularity. We need to look at these words contextually and determine that they are directed towards the brand. For example, someone could write “I’m wearing Adidas and my iced coffee is fabulous”. The word fabulous does not refer to the brand in this case, but the iced coffee.

The pattern of words we want to capture are likely related to positive comments.

Popularity is defined as being accepted, admired, liked, wanted, practiced. The sentiment –words, phrase that we look for should be related to those terms.

Context needs to be considered, however. For example, the phrase “that is just awesome” or “that is awesome” can be a positive comment or a negative, sarcastic comment. Some words or phrases that might indicate that a product is popular include: “want one” , “love this”, “so cool”, “best”.

Comparative statements reflecting opinions about products also need to be considered. Phrases such as “better than” or “not as good as” need to be considered in relation to the product being named.

An enumeration of the frequency of sentiment scores will help to differentiate which of the 10 potential new products have the highest score for popularity. However, this does not provide any information on how these new products compare in popularity to the products in the existing line. It might be interesting to gather information on the popularity of the existing products and see how the popularity of the proposed new products compare, in order to provide more context.

*Question:* Some brands may offer products that are not clothing. Do we want to consider which sentiment responses are only related to clothing? Or are interested in attitudes towards the brand as a whole? For example, Nike and Adidas sell shoes and clothing. Do we want to only about the perception of the brand as a whole or only related to the clothing they sell (not shoes)?

## Only add popular brands to the product line. Which brands are customers most likely to buy based on their attitudes towards the economy?

**Alert Analytics Response**

This question is not easily answered and would require extensive analysis, beyond the scope of the current analysis. It isdifficult to judge sentiment towards economy and interpolate that if a customer buys a certain brand it is due to the economy. Correlation does not imply causation. Additionally, **c**ustomers with a certain attitude toward the economy may vary in their response to purchasing and brand favorability. For example, let’s assume that two customers (A and B) may believe that the current economy is poor. Customer A may choose to buy Brand C because they think it is the correct course of action. Customer B may believe that it is a bad time to buy Brand C or any other brand. Individual responses to economic conditions, brand, and purchasing will vary over a spectrum of responses.

## Only add popular brands to the product line. Which brands are trending upward in popularity?

**Alert Analytics Response**

If sentiment analysis is sampled over a period of time this should be able to be determined, unless the product is very new. Frequently new products are greeted with skepticism and sometimes hated. Thus, new products that have a good chance towards acceptance may only receive negatively skewed sentiment at first—which may be misleading. Additionally, after a period of time, it may be difficult to adequately interpret results if a trend goes from initial negative results to a swing to more positive results. This upward trend may be skewed because of the initial overly negative trend.

*Rationale and Approach*

The first sets of words that need to be captured are related to finding one of the top 5 (or 10) brands that we are assessing.

The pattern of words we want to capture would most likely be related to positive sentiment. Words that we would look for include great, wonderful, happy, etc. The word “great” is interesting as it needs to be considered in context, as it can also refer to size. There are many words that denote positivity and they need to be considered in context. We need to verify that they are used to refer to the brand and not something else in the text (context).

Sarcasm is another thing we need to be aware of. The comment of “Oh yeah, right”, may be a negative sarcastic comment. It is difficult to fully know unless the context of the greater statement is assessed.

Over time, to consider a positive trend we should see negative sentiment decreasing and positive sentiment increasing.

*Question:* Are we assessing all of the proposed brands for this, or only the top 5?

*Question:* What time period are we assessing for brand popularity?

## Only add popular brands to the product line. Which brands are trending downward in popularity?

**Alert Analytics Response**

A tabulated response determining which brands are trending downward in popularity should be able to be determined, using sentiment analysis, unless the brands are very new.

*Rationale and Approach*

If sentiment analysis is sampled over a period of time this should be able to be determined, unless the product is very new. Frequently new brands are viewed negatively. Therefore, a negative sentiment result may just be occurring due to the newness of the product. If sentiment remains negative for a period of time after the initial release, that may indicate that the perception of the product is indeed negative. If the perception of a product/brand is truly negative, we should see negative sentiment increasing and positive sentiment declining over time.

The first sets of words that need to be captured are related to finding one of the top 5 (or 10) brands that we are assessing. Next, words or phrases that capture negative sentiment need to be sought out. These words include upset, mad, inadequate. Note that the word ‘mad’ may have a different context , as it could be used in the phrase “I am mad about this product”, which indicates a positive excitement.

When a negative comment is made, we need to be certain that it is related to the brand itself, and not to something else that is included in the comment.

*Question:* Are we assessing all of the proposed brands for this, or only the top 5?

*Question:* What period of time are we assessing? This needs to be specifically determined so that we know what the trend is.

## Only add popular brands to the product line, ideally added brands would be viewed as being consistently popular. Which brands have an inconsistent trend in popularity?

**Alert Analytics Response**

There are many questions to be answered before a final answer can be given, but it is highly likely that this question can be answered. The answer likely can be compiled by tabulating the sentiment responses. If the product is really new, the period of time to assess would need to be smaller.

*Rationale and Approach*

The pattern of words we want to capture would most likely be related to both negative and positive sentiment.

The first sets of words that need to be captured are related to finding one of the top 5 brands that we are assessing. We would then look for both the negative and positive words and phrases that we filtered for previously when we were assessing for positive and negative sentiment trends. It is likely that we can determine if popularity is inconsistent.

*Question:* Does inconsistent trend in popularity mean peaks and troughs of sentiment over time? Alternating highs and lows? What period of time? Or, does it mean that it simultaneously receives both strong positive and strong negative sentiment? Or, does it mean something else?

*Question:* Are we assessing all of the proposed brands for this, or only the top 5?

*Question:* What period of time do we to examine to determine inconsistency? This has even more significance if we are looking at peaks and troughs of responses.

## Add brands that will be popular because they look good on our customers. Which of these brands look best on our customers?

**Alert Analytics Response**

This is not a question that we can give a realistic answer to. The customers of any given company have many and varied physical characteristics. Customers are not homogeneous in physique. People have different heights, weights, builds, and live in different climates, therefore wanting different types of apparel. Most likely the customer base is a heterogeneous mix of people with differing physical characteristics. Additionally, what one person perceives as being a good style for a particular body build may be disagreed with by others.

## Add brands that are popular with fashion critics. Which 5 of the 10 are most popular among fashion critics?

**Alert Analytics Response**

There are open questions that need to be answered before a definitive response can be given. We feel that this may be a challenging question to answer. If a fashion critic advocates one brand it does not necessarily mean that they favor it. Opinions also may vary from fashion season to season.

If the profile names of the critics can be obtained, we may be able to gather this information, unless they all have blogs stating which brands they prefer. Accessing blogs they personally author may provide the needed information.

*Rationale and Approach*

*Question:* Before this can be answered we need to determine which fashion critics’ opinions are of interest. In order to access the comments made by a specific designer we need their profile name. The profile name used may vary between social media sites, so all profile names used by a designer need to be identified. If their UserID can also be identified that may also be helpful. First and last name is needed, plus any nick names that may be of interest.

There are two ways we could filter on the critics’ opinions: The first and very best way is to directly access their posts via their profile name. One issue is that a designer may have a valid profile name on one site, and that profile name may be used by another person on another site. We will need to be aware of this so that perceptions from the wrong person are not gathered.

Once we have filtered on the profile names/names of the fashion critics, we want to then conduct the same analysis that we did for #1: Which brands are the most popular. The only difference will be that we are only looking for the responses that are solely that of the fashion critics.

The second way is to look for a designer’s name referenced in context with sentiment. However, this is an indirect approach and may not accurately reflect the opinion of the designer as it is likely sentiment posted by someone else. For example, someone may state “Designer ABC loves Coach shoes”. However, this is not necessarily correct, and we should avoid this approach.

Another option is to access any blogs that a designer directly writes. By doing this we don’t need to know their profile name. However, there is no guarantee that brand preference is mentioned when a blog is written. Additionally, if a designer writes that they like Brand A, it does not necessarily mean that they prefer it over other brands. Thus, it may be difficult to draw any conclusions.

## Which product categories will have the highest sales (this information is needed to plan inventory)? For each of the product categories we carry (dresses, skirts, tops pants), which brands carry the most popular items?

**Alert Analytics Response**

Sentiment could be used to determine which product categories are the most popular within brands. However, it suggested to instead look at product category rankings to determine which brands have the most popular items ( dresses, etc. ). Sentiment analysis could be used as an additional input, but not the primary input.

*Rationale and Approach*

Regarding sentiment, popular opinion can be assessed to determine which product lines per product have the most frequent expressions of product sentiment. This assessment will be conducted on the top 5 new brands. The first sets of words that need to be captured are related to finding the top 5 brands that we are assessing (narrowed down from the top 10).

The pattern of words we want to capture sentiment about are the product categories of dresses, skirts, tops, pants. Those words, and similar words pants/slacks/capris/etc. need to be searched on. Sentiment looking for words that have positive connotations regarding the categories needs to be searched on. For example, “like these pants”, “love this top”. Dislike also needs to be considered, because if negative sentiment is strong towards a product category that needs to be known. For example, “ these pants are flimsy”. There are many ways that clothing can be described to be well liked, and also disliked, and those words or phrases need to be included.

Because of the preceding we believe that tallying feedback on customer reviews will provide a more complete and straightforward assessment of product category attitudes, if this information can be obtained. An example of product category includes numeric rating that is often 1 through 5 or possibly 1 through 10. This is l the preferred approach.

*Question:* Is this information to be obtained only for the new brands that will be carried, or for all brands that Generation Luxe carries which provide dresses, skirts, tops and pants?

## What color combinations do our competitors offer. What retailer will be carrying the most exciting color combinations next season?

**Alert Analytics Response**

This is a question we will not be able to succinctly provide an answer to using sentiment analysis. We suggest using other approaches.

*Rationale*

Sentiment analysis likely will not list all color combinations that a competitor offers. This information could likely be obtained through other web crawl approaches. The colors a competitor offers may be listed. If it is per product type, the information may be more difficult to obtain.

While It may be possible to find what color combinations will be offered, determining which colors people find exciting may be difficult due to context. If excitement is expressed as sentiment it may be difficult to clearly state that it is due to a color combination. The comment “I love my red blouse” may be more related to fit or fabric than color. People making comments are not always providing exact comments regarding their perceptions. Additionally, people like different color combinations so responses will likely vary.

It may be better to focus on what the designers classify as the color of the year and then consider which of the new potential brands offer that color. That information should be able to be obtained outside of using sentiment analysis.

*Question:*

Please clarify if your goal is to determine if a color combination is a group of colors to be paired together or instead the colors that each product type comes in.

## Determine what customers like about the top 5 brands in order to augment advertising. What do customers like abut each brand?

**Alert Analytics Response**

This is a question we should be able to provide answers to using tabulated sentiment scores.

*Rationale and Approach*

The first assessment will be to filter on the 10 possible brands of interest.

Next, we look for words that indicate liking the brand. What needs to be done is to analyze sentiment to determine if the brand is liked. Words to consider include respect, trust, admire. The pattern of words we want to capture sentiment about need to be considered contextually, as we need to understand context to know if words or a phrase describe like or dislike. For example, the phrase “this is one mean brand” may indicate it is highly regarded.

Through sentiment analysis we may determine that the brand is liked. However, it may be difficult to ascertain exactly why that is, unless there is a survey we can access. Knowing what words are frequently used to describe brand likeability may be enough to include in marketing. For example, “XYZ, an admired company”.

*Question:* Should information be gathered about all 10 potential brands or just the top 5 based on popularity?

## Design advertising in order to avoid brand characteristics customers dislike--What qualities do customers dislike about each brand?

**Alert Analytics Response:**

This is a question that we can provide a limited answer to. A tabulated sentiment response will be used. We believe that it may be difficult to know why an aspect of a brand is disliked, using sentiment analysis. It is best to focus on one major area of dislike, if known.

*Rationale and Approach*

In order to determine what characteristics customers dislike about a brand we first need to filter on the 5 possible brands of interest. We then determine if words that indicate dislike for the brand are present in the sentiment analysis. Example of sentiment to look for that may indicate dislike of the brand includes the terms offensive, disapprove, disgust, dislike, oppose, arrogant, elitist, etc. Phrases may include: “without morals”, “out of touch”, and “poor service”, to name just a few.

Finding these terms is not enough. The terms of dislike need to be found in conjunction with a causation in order to determine what is disliked about the company. It may be difficult to know why a company is disliked. For example, someone may say they think a company is without morals, but they may not say why , and it may be difficult to specifically determine why that statement was made.

A tabulation this sentiment to determine dislike may give an indication of whether the brand is disliked, but it needs to be thought of in light of how strong the brand is liked—responses may have wide variation from negative to positive. Even if we know that a brand is disliked we may not know why.

The most successful approach may be to go back to any major negative press the brand has had lately, due to an incident. We can then filter sentiment on the brand and the terms related to the incident. Once sentiment is discovered we can then determine how to positively address that when marketing.

Brand dislike may occur for different reasons; it is likely most cost effective to focus on avoiding a major issue instead of several smaller ones, which are likely hard to discover.

*Question:* Should information be gathered about all 10 potential brands or just the top 5 based on popularity?

## Red carpet events—which of the brands are popular because they are well liked by celebrities?

**Alerrt Analytics Response:**

It is our recommendation to not investigate this using sentiment analysis as the results will not be accurate.

*Rationale*

This is a difficult question to answer. Assessments would have to indicate whether celebrities like certain brands. We would need to know which celebrities were of interest. We would then need to measure public perception of the brands.

Even if both the public and select celebrities like a specific brand, it would be difficult to say that people like a brand just because a celebrity does--correlation does not necessarily imply causation. Assessment of the sentiment would have to look for text such as “ I like Product A because Emilio Smith likes Product A.”. It is unlikely that someone may explicitly state that. Even if they did, that may not be the direct reason the consumer likes Product A, there may be other causes. Also, some people may like a product because a celebrity does—but there is not written record of this that can be accessed.