

PREDICTIVE ACCOUNT SEGMENTATION AND SCORING

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WHAT IS MARKET SEGMENTATION?

The purpose of market segmentation is to identify high-yield categories of customers and prospects in order to increase sales revenue and retain existing accounts. High-yield segments are those categories of customers that are likely to be the most profitable or have the most potential for growth. Typically, companies start by determining the overall market available to them, called the Total Addressable Market or TAM. TAM is then divided into smaller groups known as segments.

Segmentation is also used to develop profiles to identify key markets in order to better understand account needs and motivation. Key segments are then selected for targeting and positioning products and services in a way that is likely to resonate with the selected market.

Analysis of shared account attributes, or characteristics, allows analysts and systems to assign points or grades to each account and group accounts into segments and sub-segments. Marketing and Sales organizations can then use this information to develop campaigns for lead development, opportunity prioritization and pipeline optimization, marketing fund allocation, sales rep capacity planning, and territory and quota planning.

B2B sellers might segment the market into types of businesses (key accounts, enterprise, SMB, or vertical industries), and geographic locations. B2C sellers might categorize market segments by demographic (age, gender, etc.), lifestyle, geographic, and behavioral similarities.

Most often, market analysis is done using Firmographic and Psychographic data. Firmographic data is **Quantitative** attribution of individual accounts such as:

- Annual revenue
- Number of employees
- Industry
- o SIC code
- Geographic location

Businesses enrich internal account and transactional data with the above types of attributes in order to perform analysis. Data can be enriched via sources like Dunn & Bradstreet, InsideView, Clearbit, and government agencies fairly cheaply. Internal data is known as first-party data.

Psychographic data is **Qualitative** attribution used in analysis for segmentation. When a relatively complete profile of a person or group's psychographic make-up is constructed, this is called a "psychographic profile." Categories of psychographic attributes used in market segmentation include:

- Activity, interest, opinion (AIOs)
- Attitudes
- Values
- Behavior

Marketers often hire commercial research firms to carry out segmentation analysis, especially if they lack the statistical skills to undertake the analysis themselves. Some segmentation, especially post hoc analysis, relies on sophisticated statistical analysis.

MARKET SEGMENTATION LIMITATIONS AND CHALLENGES

B2B decision-making in the segmentation process is highly complex. Businesses are more rational and buy based on needs rather than wants. Purchases are often based on relationships as well as needs and often involve multiple people

and departments. B2B solutions are often tailored for a specific customer and buying cycles are longer. There are more reasons to ignore segmentation data, including that:

- It fails to identify sufficiently narrow clusters.
- Geographic/demographic segmentation is overly descriptive and lacks sufficient insights into the motivations
 necessary to drive communications strategies.
- In B2B, often you don't see the full picture:
 - o What you see: Internal data, systems, intuition, experience, etc.
 - What you do NOT see: Everything else.
- There is complexity in sales models, global impacts.
- There is a lack of ability to consolidate Customer and Prospects data.
- There is limited insight for business development purposes, which doesn't specify how much effort should be expended on each account.
- Cannot inform the approach to take when developing relationships with key individuals.

For these reasons (and more), it's always necessary to provide the ability to override calculated account scores or rank when using an automated solution.

Lately, businesses are turning to tier-based segmentation, which is more subjective than relationship-based segmentation. Each segment reflects the long-term value of customers or prospects. These segments define the accounts to which key account management techniques will be applied. Tier-based account segmentation means that the business development team must think more deeply about the value and potential contribution from each account. This method of segmentation should also be enhanced with firmographic data. When quantitative firmographic data is combined with a qualitative subjective approach, it often makes for a well-informed strategy.

PREDICTIVE MODELING AND AI

Advanced technologies such as machine learning (ML) and artificial intelligence (AI) allow further analysis and predictive modeling using both first-party (internal) and third-party data. In fact, initial TAM calculation, market segmentation, and scoring can be performed using predictive models without human intervention from Marketing Analysts/Sales Operations. However, when it comes to account scoring and weighting attribution, most businesses rely on individual business knowledge, as there are often intangible factors needed to make decisions.

THIRD-PARTY DATA

Third-party data can be collected and merged with first-party data to provide a bigger picture of each account profile by using advanced technologies. Third-party data includes information such as indicators based on content gleaned from web browsing and social media postings. Individual companies and individuals can be matched to this data. Examples of attribution based on third-party content are:

- Firmographic data.
- Financial growth.
- HR trends: open positions, existing positions, departments.
- Technology and install base, e.g., already have cloud technology.

- What content companies are researching online? Which ads are clicked?
- Have researchers visited my website? What products/links were clicked?
- When were sites visited, how much time was spent?

Some AI indicators might lead to better behavioral segmentation typically used for consumer-based buying.

- Benefit-sought: e.g., economy, quality, service level, convenience, access.
- Buyer readiness: e.g., unaware, aware, intention to buy
- Attitude to Product or Service: e.g. enthusiast, indifferent, hostile; price conscious, quality conscious
- Adopter Status: e.g. Early adopter, late adopter, laggard

PREDICTIVE SEGMENTATION AND SCORING PROCESS IN ANAPLAN

The new Predictive Account Segmentation and Scoring application combines planning and "what-if" capabilities with Al insights. This allows CMOs and sales ops to perform analysis using intelligent insights while they retain the ability to apply "tribal knowledge" and specific company experience for segmentation and individual accounts.

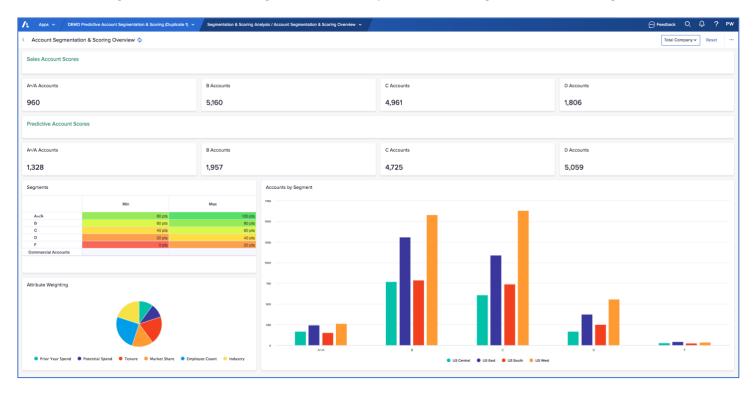
BENEFITS OF COMBINING ACCOUNT SEGMENTATION AND SCORING PLANNING WITH PREDICTIVE AI

- Intelligently compare Anaplan calculated scores to the Predictive Model's AI score and ranks, and override based on recommendations and buying indicators at the account level.
 - Leverage list of suggested account reviews based on score comparison.
 - · Review account intents vs. calculated weighted score in context, at the account level, for greater insight.
 - Retains the ability to override segment and score based on personal account knowledge and relationship.
 - Use predictive score/rank and overrides for final account scores.
- Plan and model segments by geographic hierarchy, Industry, and other dimensions.
 - Bring in scored account data and it is automatically rolled up into the geographic hierarchy.
 - Can model/pivot and analyze by industry and other qualitative attribute dimensions.
- Analyze buying intentions to change quantitative attribute weighting.
 - Add additional segment attributes and/or change weights based on top ideal customer profile (ICP)
 indicators and buying signals where applicable.
 - Anaplan model recalculates in real-time with suggested changes.

PREDICTIVE ACCOUNT SEGMENTATION AND SCORING: NEW ANALYSIS DASHBOARDS

ACCOUNT SEGMENTATION AND SCORING OVERVIEW

This is the landing dashboard: Account Segmentation & Analysis -> Account Segmentation & Scoring Overview



Navigate to the Overview dashboard to talk about Anaplan segments and scoring vs. Al scoring.

Segments, Attribute Weighting, and Accounts by Segment used for the Anaplan model and to calculate the Sales Account Scores are more subjective and typically based on firmographic data and marketing analyst/sales ops analyst analysis and experience. Predictive Engine AI scores are based on firmographic data as well, but are also based on third-party fit indicators based on the ideal customer profile (ICP); intents based on existing customer wins and those accounts who most resemble those wins. Machine learning algorithms are applied to identify top intents based on third-party online digital footprints and are appended to account and opportunity data. Once indicators and intents are identified, additional optimization is performed via propensity modeling, which applies additional machine learning logistic regression and gradient boosted decision trees. Final results are used to score and rank accounts. The data-driven insights on profile fit and buyer intent are used to determine the ICP, which is different for every customer implementing Predictive Account Segmentation and Scoring.

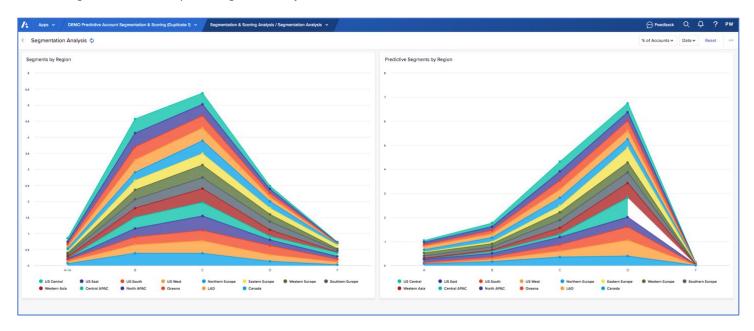
- The main KPI shows a side-by-side comparison of accounts for each segment. The AI segments are set, e.g., always ranked and clustered with A, B, C, and D identifiers.
- Anaplan segments are set up and can be customized within the application. For comparison and presentation
 purposes, we used the same segment names as the AI platform for the demo. Customers will most likely use
 their own segment names, for example, Key Accounts, Enterprise, Mid-Market, and Vertical, or whatever suits
 their industry and products.
 - The left side of the page displays the Anaplan Segments along with the number of points used for scoring each cluster.

• The pie chart in the lower left corner displays the quantitative and qualitative attributes and the weighting of each that was used in calculating account scores.

The column chart displays the number of Accounts by Segment (Anaplan segment). When different levels are selected at the top of the page, the chart is synchronized for that region or sub-region.

SEGMENT ANALYSIS

Account Segmentation & Analysis -> Segment Analysis



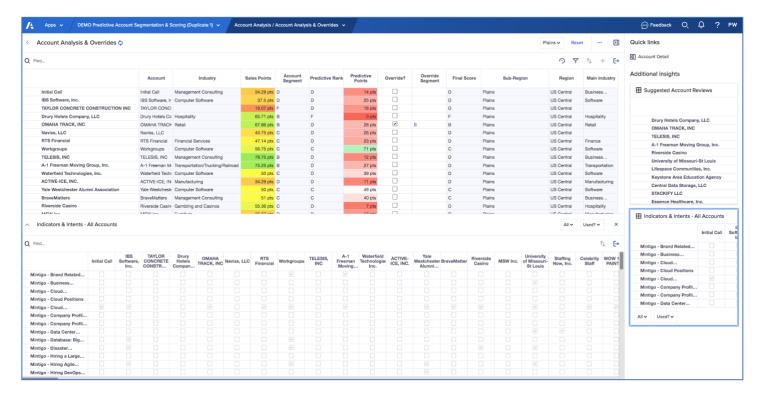
This is another side-by-side comparison of the number of Accounts by Region for each segment.

The left side represents Anaplan's model segments, the right side represents the predictive model's segments.

Different metrics can be selected at the top of the page, e.g., compare by % of accounts, total points, or average points for further analysis. This comparison helps to identify segments to target for downstream processes, e.g., Territory Planning.

ACCOUNT ANALYSIS AND OVERRIDES

Account Analysis → Account Analysis & Overrides



In this dashboard, CMO and Sales Leaders view and compare scores and segment ranks holistically at the account level.

- Suggested Account Review in the Additional Insights panel allows you to quickly see all accounts with score disparity. (The disparity amount value is configurable within the app.)
- The **Indicators & Intents** insight widget provides a view across all accounts for all intents. (Seen at the lower third of the page.)

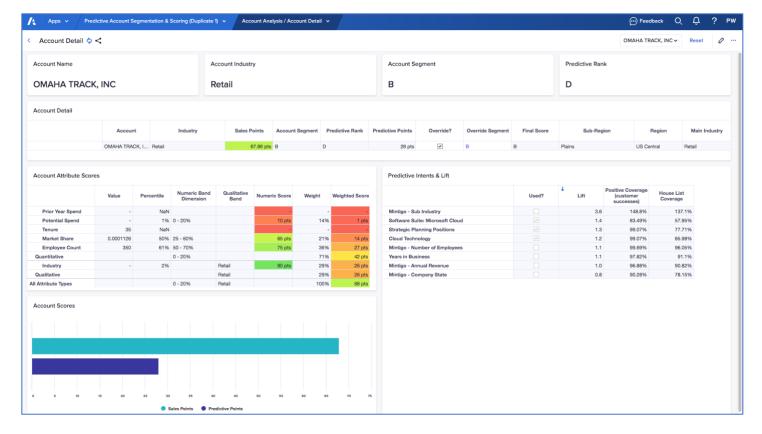
You can filter by region, sub-region, and industry or sub-industry, and also rank or score ranges to narrow down the list of accounts.

Override account segments by checking the "Override?" Boolean check-box for the particular account and selecting the new segment in the "Override Segment" column. Drill into account detail (on the next screen) and use account-level insights.

Final Score is anything that's been overridden or it's the AI score if there is no override. (Final Score can also be configured differently, if the customer desires.)

ACCOUNT DETAIL

Account Analysis → Account Detail



Here's where individual account knowledge and discretion comes into play. In the dashboard, review the attribution weighting used for the Anaplan score in the "Weighted Sales Scores" table on the left and compare that to the "Predictive Intents and Lift" factors on the right that are used for scoring by the Predictive AI Engine for individual accounts.

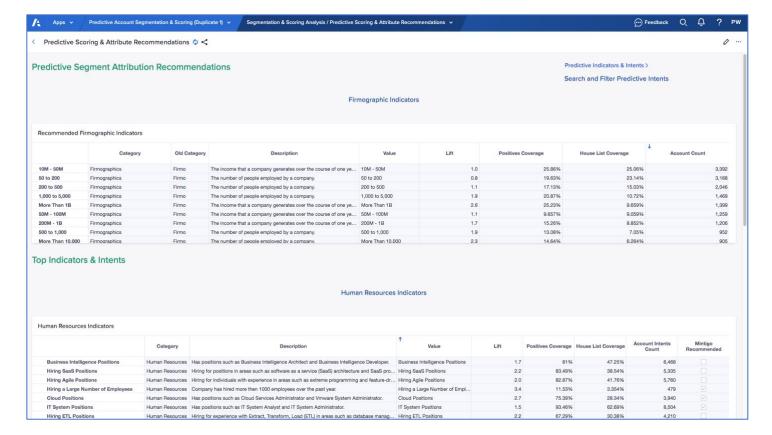
Do I, based on personal knowledge and recent activity with the account, override the original segment with the Predictive AI Engine's segment (rank)?

Do I leave the segment score as is?

Do I change the segment to something different from both scores, based on weighting, intents, and personal knowledge?

PREDICTIVE SCORING AND ATTRIBUTE RECOMMENDATIONS

Segmentation & Scoring Analysis --> Predictive Scoring & Attribute Recommendations



Predictive model components based on the ideal customer profile pre-determined by the Predictive AI Engine are displayed in this dashboard. Analyze buying intents to change quantitative attribute weighting. Firmographic data used for segmentation is displayed on the top along with the number of accounts that fall within each category. Buying intents with lift factors used in segmentation scoring and the number of accounts attributed to each intent are displayed within the applicable categories in the dashboard.

- Add additional segment attributes and/or change weights based on top ideal customer profile (ICP) Indicators and buying signals, where applicable within the Anaplan Model.
 - The Anaplan Model recalculates automatically with the suggested changes.

For example, geographic firmographic data was used by the Predictive model in segmentation, but geography was not considered by the Anaplan model as a part of scoring accounts.

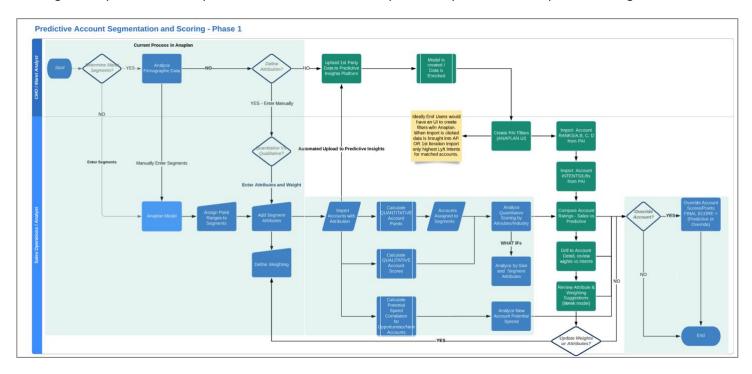
The new Predictive Account Segmentation and Scoring application combines planning and "what-if" capabilities with Al insights. This allows CMOs and sales ops to perform analysis using intelligent insights as well as to retain the ability to apply "tribal knowledge" and specific company experience for segmentation and individual accounts.

MODEL AND INTEGRATION OVERVIEW

High-level processes and integration steps follow below.

PROCESS FLOW AND STEPS

Existing model processes are represented in blue and the new predictive processes are represented in green.



ANAPLAN MODEL

The Anaplan Model used as the basis for the Predictive Account Segmentation and Scoring model was downloaded from the App Hub. This model includes actual processes for planning and modeling segmentation, and for scoring. The model also contains "what-if" analysis and the ability to model Potential Spend (by account) based on several calculations: Industry Average, Potential Spend Assumption, % Growth Assumption, and a Correlation Calculation. Potential Spend overrides can also be performed and spend calculations can vary across accounts. Potential Spend is also useful for capacity and territory planning. When potential amount values are associated to accounts, this can feed directly into additional planning solutions along with number of accounts, industry, and geographic information. Manual Overrides to account scores can be easily performed. Insight based on Planning and Predictive AI metrics and buying indicators help CMO/Sales Ops to determine final scores. Accounts and their Final Scores for A, A + B, and C segments are used for Sales Capacity and Territory Planning.

Processes are included to clear data from the model, populate lists, and set up user access. However, you'll likely want to use the Account and AI data included for Demo.

We recommend using existing Demo data because there are many accounts (~14K) that include metrics such as Prior Year Spend, Tenure, Market Share, Employee Count, etc., used for attribute weighting, which are used to calculate account scores. Enriched Account data was imported from an actual Predictive Insights Demo Model and massaged. Weighting is used in the overall calculation of the Anaplan Score across attributes. Predictive AI data associated with

each account, such as account rank, score (number of points), buying indicators along with lift, and lift calculation metrics, are also included in the model and used in various dashboards.

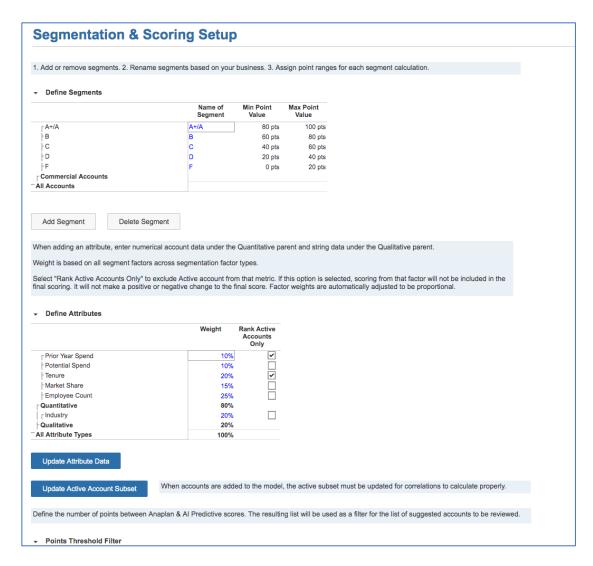
MODEL SETUP STEPS: ADD/MODIFY SEGMENTS, DEFINE/MODIFY ATTRIBUTES AND WEIGHTING

Segments are setup with rank names, A, B, C, D, and F which correspond to ranking names provided by the predictive model (Predictive Insights). Predictive Insights ranks are set and do not change; the same ranking is used across all client AI Models. Changes to the Anaplan Segment names can be easily updated if needed. Originally, we had three segments: Key Accounts, Enterprise, and Mid-Market. Two additional segments were added, and names were changed to mimic the AI segment clusters for reporting and dashboards.

Steps for setting up segmentation and scoring are as follows:

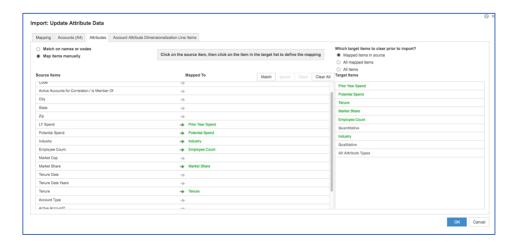
- Add, remove, or modify **segments**. Change your segment names (if desired) and update each segment's point range.
- Add, delete, or modify quantitative attributes. If doing so, you'll need to import new metric values.
 - a. For example, if you have data for Market Cap, add that as a new Quantitative Attribute, add to the Accounts (A4) list (if not there), add new mapping in the "Update Attribute Data" import action by finding the action in the "actions" tab and edit the action so that your new attribute is mapped appropriately. Add the attribute to any other modules where it may be used for calculation, e.g., Account Attribute Calculations.
- **Update Account List**: Clear and Configure dashboard. This process deletes and imports attribute data into the Account (A4) list. Perform this step ONLY if using new Account Data for implementation or customized demo.
- Run **Update Attribute Data:** This process imports metrics as text data in the Account Attribute Dimensionalization module.
- **Update Active Account Subset:** If needed, include a column to update the Account list subset, which indicates if an account is active (customer) or not (new). There's a formula in the Active Account list property that changes the Boolean to true if LY Spend is greater than 0. You can export the list and re-import after populating the subset using this logic or your own logic if you don't have actual account data. The subset is used in calculating the potential spend correlation.
- Enter the point value in the **Points Threshold Filter**.
 - **a.** This is the disparity value between calculated Anaplan points and AI points that is used for filtering the Suggested Account Review list in the Account Analysis and Overrides dashboard (NUX).

Anaplan model set up screen



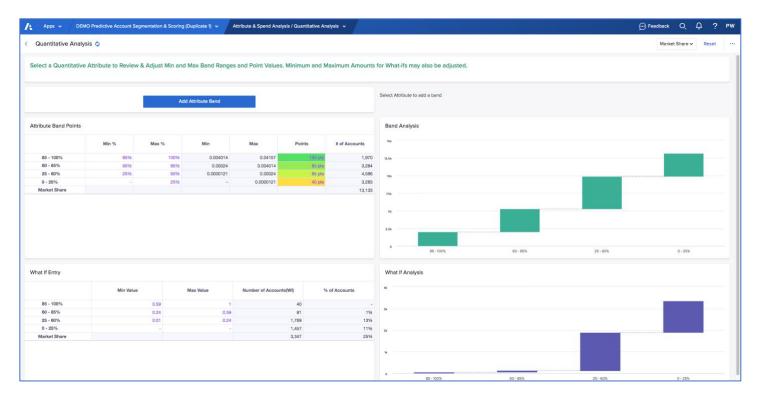
Update attribute data

Run this process if adding new attributes. You'll need to update the mapping in this process first if names are modified or new attributes added.



Define the point ranges for each quantitative attribute if not set up already. Add or remove bands, click the Add Attribute Band action, and modify the minimum and maximum ranges.

Adjust the number of points allotted to each band. Changing min and max ranges and number of points directly affects account scoring.



Band Chart Set up, "What-If "Chart Set up, Potential Spend Calc, Potential Spend Correlation, Define Qualitative, Set up Attribute Bands

IMPORT ACCOUNT DATA

Customer data is either fed directly to Predictive Insights, modeled, enriched, tested, and scored. Or it is imported into Anaplan and pushed into Predictive Insights via direct integration. (Integration is not yet available, but we expect something by the end of 2019. We also expect to have automated integration for updating account scores, intents, and buying stages.)

If pushed directly into the Predictive AI Engine from Anaplan (recommended approach), we will be able to retain the unique Anaplan code and match this during re-import. Data will still need to be modeled, enriched, and scored within Predictive Insights before re-importing back to the Anaplan Model. See basic Predictive Insights Set-up Steps below.

The advantage to using the push from Anaplan is that you won't need to massage the data before re-importing. Firmographic metrics are easily retained and mapping to create a geo hierarchy won't be needed.

We are working on integrations between Anaplan and Predictive Insights. Initial integration actions to be included in the demo model and available for customers are:

- Account Push from Anaplan to Predictive Insights: Positive List (Customers) and House List (Prospects).
- Industry Pull from Predictive Insights: Populates Industry List in Anaplan with relevant account industries/sub-industries.
- Account Indicators: Populates Predictive Insights Indicators Lists and Modules.

Account Attributes: Updates Account list and Modules with appended data from Predictive Insights. Includes
additional firmographics, including Account Annual Revenue, Employee Count, Industry, and Geo information;
Indicators and Intents with lifts and lift coverages.

CALCULATE ACCOUNT SCORES

The process remains as is for the Anaplan planning piece. You manually add segments, quantitative and qualitative attributes, and weighting—see above. If using the demo data, you'll likely leave these metrics as is. However, you can update any of these factors if some other quantitative metric and different weighting resonates more closely with the prospect.

After the account data is imported and you run the Update Attribute Data process, scores are calculated automatically.

POTENTIAL SPEND CALCULATION

To setup the Potential Spend calculation(s) you will need to add the Spend Method (Set Potential Spend By) in the Potential Spend Analysis dashboard or module. The % Growth Assumption is the easiest to set up. Add the % Growth Value, e.g., 20%, and the Growth Amount, e.g., 10,000, or some other value. You can mix the calculation type based on some factor, e.g., industry, or geo.

You can also override by selecting the Override "Set Potential Spend By" type and entering a value in the Manual Override Value field, or by entering a percentage in the Manual Override % Growth.

Apps v DEMO Predictive Account Segmentation & Scoring (Duplicate 1) v Attribute & Spend Analysis / Potential Spend Analysis & Overrides v ⊕ Feedback Q. △ ? PW Total Company ▼ Reset … ▶ Quick links Potential Spend Analysis & Overrides 🗘 Q Find. Additional insights Industry Industry Average Set Potential Spend By: Initial Call Enter or Update Growth Assumpti... 949.761 TAYLOR CONCRETE CONSTRUCTION INC % Growth Assumption Drury Hotels Company, LLC OMAHA TRACK, INC - Retail 850,696 1,527,722 % Growth Assumption 1,273,102 414.085 Computer Software 496,902 % Growth Assumption 949,761 TELESIS, INC 1,508,250 Management Consulting Waterfield Technologies, Inc. ACTIVE-ICE, INC. - Computer Software 949,761 1,426,712 Management Consulting 1,048,458 1,712,054 % Growth Assumption Riverside Casino 568.875 University of Missouri-St Louis 1,492,518 Higher Education 1,050,808 1,791,022 % Growth Assumption Staffing Now, Inc. Staffing and Recruiting 839,262 283,625 Staffing and Recruiting WOW 1 DAY PAINTING 422,993 % Growth Assumption 352,494 Consumer Services 668,355 Apogee, LLC Lifespace Communities, Inc. 753,009 Keystone Area Education Agency Education Management 1,028,779 criptpro LLC Pulse Systems, Inc. Hospital and Health Care 835,486 Central Data Storage, LLC 1,355,389 Hospital and Health Care - Construction 835,486 1,626,467 % Growth Assumption BLACK FOREST DECOR, LLC - Retail 850,696 STACKIFY LLC 949.761

POTENTIAL SPEND ANALYSIS & OVERRIDE CALCLUATIONS & DASHBOARD

Update the newly calculated potential spend values for accounts by clicking the "Post Potential Spend to Account" action. This updates the Potential Spend values in the Account List.

1,830,442 % Growth Assumptio

1,240,175

1.525.368 Restaurants

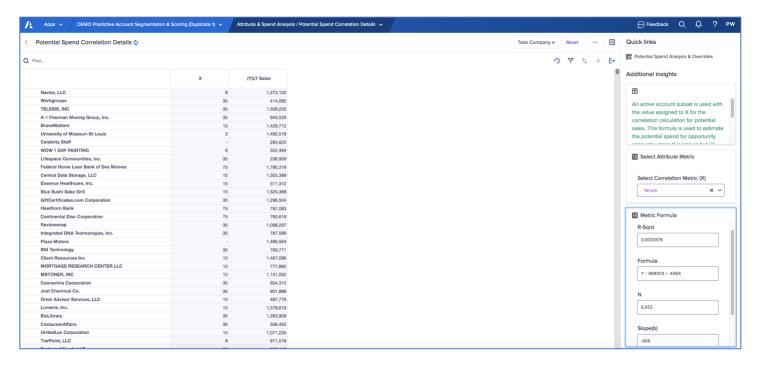
Essence Healthcare, Inc.
The HON Company LLC
Blue Sushi Sake Grill

GiftCertificates.com Corporation

Correlation Details explains how the potential spend and other quantitative attributes are calculated.

Select the Quantitative Attribute Type "Metric" in the Additional Insights panel to view the account data values and the corresponding calculation information.

The screen shot below details the Tenure calculation.



The Correlation Metric type selected corresponds to the quantitative value you want to correlate potential "Spend By." Basically, it's the best indicator based on the KPIs and data you have for the accounts.

Calculations are performed against Active Accounts only.

Prior Year Spend

Not modified by any formula, X = 1

Potential Spend

• Is calculated when in the Potential Spend Analysis Dashboard. Applies the % Growth Assumption amount entered against Prior Year's Spend amount.

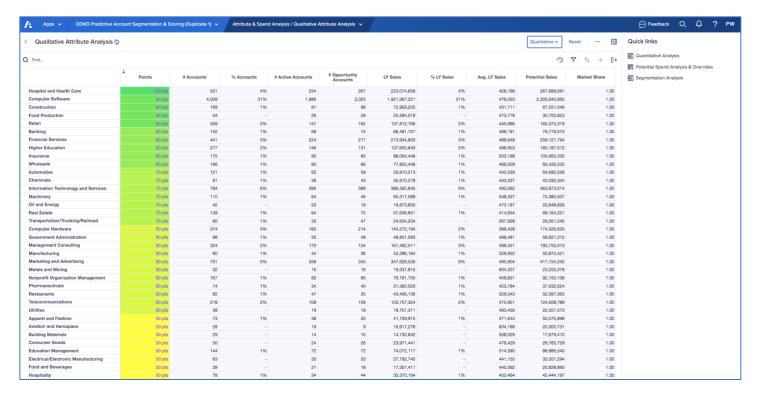
Tenure

Market Share

Employee Count

QUALITATIVE ATTRIBUTE ANALYSIS DASHBOARD

Attribute and Spend Analysis → Qualitative Attribute Analysis



Review metrics across accounts by industry to narrow down commonality for highest potential. If the grid is blank, select "Qualitative" in the attribute type drop-down.

PLATFORM PREDICTIVE MODEL SET UP

See the Predictive Insights Modeling Guide for more detailed information. What follows is a simple setup description.

As mentioned above, it's suggested that data be pushed into Predictive Insights from the Anaplan model. Accounts roll up the Geo hierarchy configured within the Predictive Account Segmentation and Scoring model. Customer Accounts (wins) along with prospects are imported into Anaplan along with any firmographic attributes. Be sure to populate the Account (L4) Code with a unique identifier.

In order to score accounts, you need to create a model in Predictive Insights using the newly imported account data. Manual steps to accomplish this follow.

Set up your Customer Predictive Insights Account: Create a new password, if needed, and log into your account.

Create a New Market: If this is a new Predictive Insights account, you'll be asked to create a Market (name), which you create the model for.

Data: Account data should include fields to identify the account as closed/won (Positive Set) or new prospect (House List). It's best to have separate files for each source type. This is known as **Conversion** data. Also include any other Interaction data if possible. For example, product(s) purchase history, or other behavioral data. During manual import, you'll need to set up mapping from the source (export) to the target fields. When data is imported into Predictive Insights, it is validated, matched to Predictive Insights existing account data, and appended with all data that Predictive Insights has for that account record.

Create Model: Select the model type—either single product or multiple products. A simple wizard walks you through this process. Machine Learning Algorithms are applied to accounts to identify top Intents based on third-party online digital footprint and are appended to account and opportunity data. Once indicators and intents are identified, additional

optimization is performed via propensity modeling that applies additional machine learning Logistic Regression and Gradient Boosted Decision Trees. Final results are used to score and rank accounts. Once accounts are scored, account information is pulled back into the Anaplan model and used for analysis.

PUTTING IT ALL TOGETHER

After reviewing Quantitative and Qualitative results, adjusting weighting and min/max scoring, and analyzing Potential Spend output and correlation, Sales Ops/CMO/Marketing Analysts proceed to further analysis comparing Planning Metrics to Predictive AI Engine's Metrics. (<u>Predictive Account Segmentation</u> and Scoring: New Analysis Dashboards.)

Accounts are reviewed and segments/scores are overridden based on internal knowledge, planning factors, and AI Fit Indicators and Buying Intents to produce more accurate results. This leads to a more informed, better aligned overall strategy and targeted set of accounts.