Audience Portrait & Models User Guide

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Contents

Audience Portrait

The Audience Portrait application allows access to the collective group of services built with the purpose of creating Analytic Datasets on a client's file(s) and then having the ability to create predictive models based on those Analytic Datasets. A predictive model uses a mathematical equation whose results describe the relationships among variables in a historical data set. The equation estimates data values by describing a mathematical relationship between an identified dependent variable and a set of independent variables used to predict the outcome of the dependent variable.

Users upload a file through the Audience Architect-Data application. The file is then processed through Acxiom CDI services and linked to InfoBase® Enhancement data and Audience Propensities scores. The cleaned and enhanced data file is then loaded into a centralized repository. The file is now called an Analytic Dataset as it is prepped and ready for analysis. Users can view and interact with the Personicx®, InfoBase Data Portrait, and Audience Propensity Portrait reports describing the detailed characteristics of the audience contained within the dataset, and through the Personicx Scattergram and Portrait reports users can learn about the behaviors, interests, and needs of their audience as described by syndicated research surveys from GfK Mediamark Research & Intelligence, LLC. In the Models application users can create look-alike models from their enhanced Analytic Dataset to use in their marketing acquisition efforts.

Analytic Datasets

What are Analytic Datasets?

An Analytic Dataset is a customer file that has been uploaded to the Audience Architect-Data application, enhanced through the Create Analytic Dataset process, and moved to the Audience Portrait application for analysis.

Analytic Dataset Actions

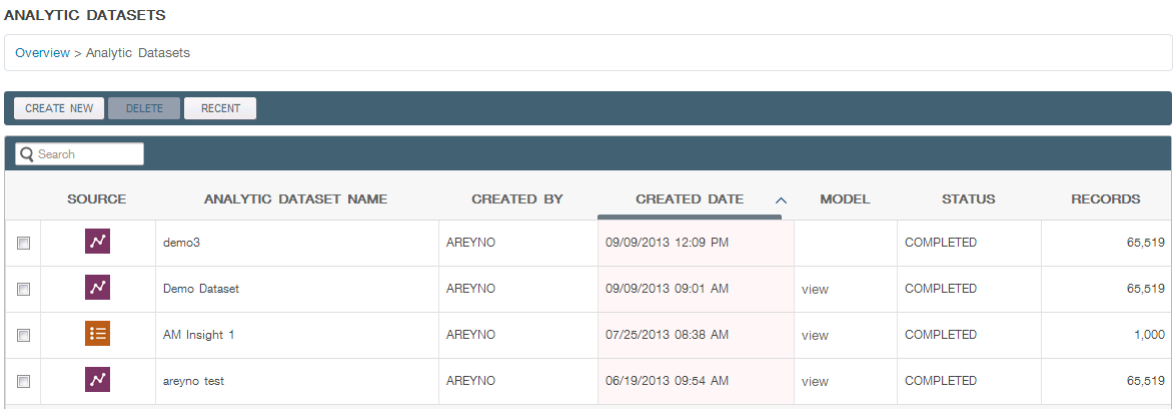
The Analytic Datasets page displays Datasets. It shows a list of all available datasets associated with your User Name. Clicking a column heading will sort the Analytic Datasets, based on the column, in ascending ^ or descending v order.

By default, the Analytic Dataset page displays all Analytic Datasets associated with the User Name with which you signed in. Clicking **Recent** will display the most recent datasets.

The following actions can be performed on Analytic Datasets:

- *View Analytic Datasets*
- *Create Analytic Datasets*
- *Search Analytic Datasets*
- *Delete Analytic Datasets*

The following is a screenshot of the Analytic Dataset page:



Overview Screen

The Overview screen can be accessed by navigating the breadcrumbs within the application. From the Overview screen, you can View Analytic Datasets, create Analytic Datasets, Learn about Models, Read what's new in Audience Portrait, and view your recent Analytic Datasets.

The following is a screenshot of the Audience Portrait Overview page.

Tiles:

Acxiom Analytics

The Acxiom Analytics tile provides a **View Analytic Dataset** link and also a **Create Analytic Dataset** link.

Creating Analytic Datasets

The Creating Analytic Dataset tile gives a brief description of the creating Analytic Dataset functionality.

Building Models

The Building Models tile gives a brief description of what the build models functionality allows you to do and links to a document describing the modeling technique used through the **Learn About Models** text located in the lower right corner of the tile.

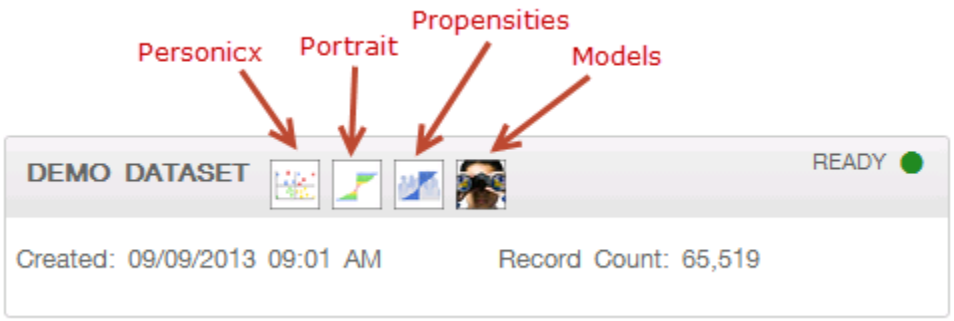
What's New

The What's New tile gives a brief description of what new functionality is now available in Audience Propensities and provides a link to a document with more details, through the **Details** text located in the lower right corner of the tile.

Recent Analytic Dataset

The Recent Analytic Dataset section displays the status of the most recent files that have been uploaded, by the client, through the Audience Architect-Data application for Analytic Dataset processing. Each of the Analytic Datasets in this area will also have a creation date/time stamp as well as the number of records in the Analytic Dataset file.

If you have recent Analytic Datasets displayed, the icons next to your dataset name will take you directly to reports or models that you previously created and that are associated with that dataset.



If no recent analytic datasets are displayed, click in the box to create an new analytic dataset.

Working with Analytic Datasets

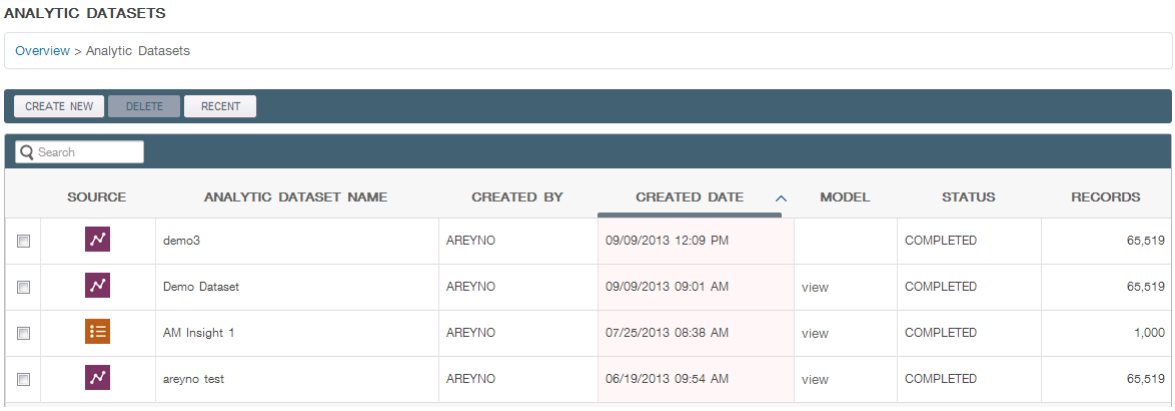
From the Analytic Dataset page you can:

- *Create Analytic Datasets*
- *Delete Analytic Datasets*
- *View Analytic Datasets*
- *Search Analytic Datasets*
- *View Reports*

Viewing Analytic Datasets

To view Analytic Datasets

From the Analytic Dataset page, all Analytic Datasets created with your User ID are displayed. To view only your most recent datasets, click the **Recent** button, or to go back to All datasets, click the **All** button.



Analytic Dataset List Options

Field Name	Description
Source	Displays an icon representing the source in which the dataset file came from. See source icon section below for a list of icons and their representations.
Analytic Dataset Name	Indicates the name of the Analytic Datasets available to you. Clicking on the name of an Analytic Dataset opens that Analytic Dataset for viewing with various reporting options. See the Analytic Dataset Lab Reports section of this document for more details on reports.
Created By	Indicates the name of the user that created the Analytic Dataset.
Created Date	Indicates the date on which the Analytic Dataset was created. Click on arrow for ascending or descending order.

Model	View – Indicates a model already exists and is available for viewing. Create – Indicates a model does not yet exist and can be created by clicking the create link. See the Models section for more details on models.
Status	Indicates the state of the Analytic Dataset. PREP [0%] SUBMITTED [10%] INITIATED [20%] QUEUED [40%] STARTED [60%] IN PROGRESS [80%] COMPLETED [100%] FAILED TO INITIATE ENHANCEMENT FAILED DURING ENHANCEMENT FAILED DURING VERIFICATION HELD
Records	Indicates the number of records in the Analytic Dataset file.

When you click on an Analytic Dataset row, a report drawer opens and the available report options are displayed. Clicking the same row again, closes the report drawer.

Clicking a report icon takes you to the Analytic Dataset Report page. See Analytic Dataset *Reports* for more information about reports.

To view Source of Analytic Dataset

In the Source column, hover over the icon to view the application name.

These icons represent the application from within the Audience Operating System that supplied the file to Audience Portrait.

The following is a list of source graphics and their representations:

 Cross Channel Planner

 Campaign Optimizer

 Analytics

Creating Analytic Datasets

To Create an Analytic Dataset

Before You Begin:

Files that you want to create Analytic Datasets for must be uploaded to the Audience Architect-Data application. If you already have files for which you would like to create Analytic Datasets located in the Audience Architect-Data application, you can skip to the **To create a new Analytic Dataset** section below, otherwise continue to the **To upload files to the Audience Architect-Data application** section.

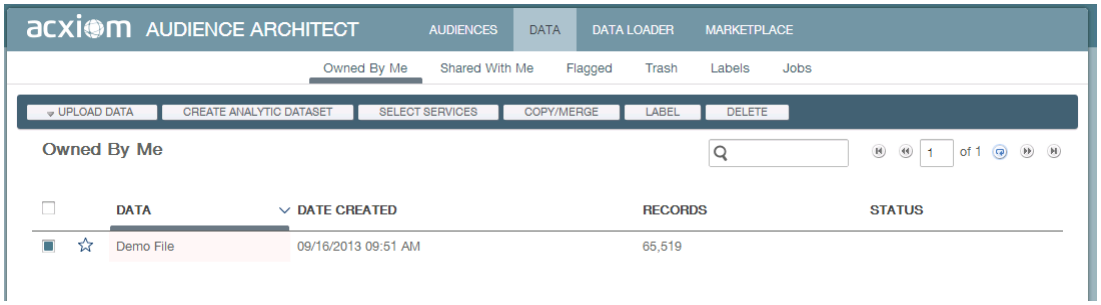
To upload files to the Audience Architect-Data Application

1. From the Analytic Dataset Files page, click **Create New**.
2. Once clicked, the next screen displayed is the Audience Architect-Data application where you will upload your file.

   Note: Files loaded by clients must contain the following fields:
   First Name
   Last Name
   Address
   City

State
Zip

3. From the Data page, in the top navigation pane, click **Owned by Me**. (this should be the default landing space)
4. Click **Upload Data.**
5. From the drop-list, select Web Upload. A dialog box pops-up.
6. Click **Open File**.
7. Navigate to the location on your computer that you have your file stored.
8. Select the file you want uploaded and click **Open**.
   Details of the file you selected will display on the Data page.
9. Verify your records look accurate.
10. In the Name field, make sure there are no underscores.
11. Click the **Upload Data** button.
    Once the file upload is complete you will see your file(s) listed on the Owned by Me page.
12. Click **Create Analytic Dataset** to start the process of creating your dataset.

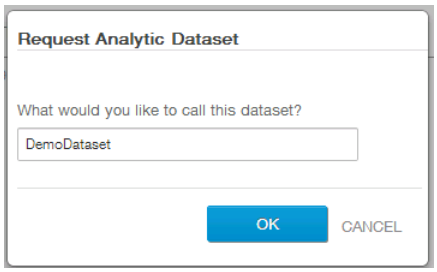


Note: Once a file is uploaded in the Audience Architect-Data application, it can only be used for the Create Analytic Dataset process once, but you can make copies to use for additional processing.

To create a new Analytic Dataset

1. From the Analytic Dataset Files page, click **Create New**.
   Once clicked, the next screen displayed is the Audience Architect- Data where you will upload your file.
2. From the Data page, in the top navigation pane, click **Owned by Me**. (this should be the default landing space).
   A page appears with a list of available files.

3. From the list of files, select the file to include in this job and click **Create Analytic Dataset**. The Request Analytic Dataset dialog box is displayed, as shown below:



4. In the text box, type a name for the Analytic Dataset request.

   Note: This is the name of the Analytic Dataset request, not the name of the job.

5. To return to the **Owned by Me** page, click Cancel.

   OR

   To submit the Analytic Dataset request, click **OK**.

6. You will then be directed to the **Analytic Dataset page** where you can monitor the status of your dataset.

   Note: You can also monitor the status of your Analytic Dataset files being created in the Recent Analytic Dataset section of the Audience Portrait Overview screen by using the breadcrumbs at the top of the page and navigating to **Overview**.

Searching Analytic Datasets

To Search an Analytic Dataset:

1. From the Analytic Dataset page, in the Search field , enter the search criteria of the Analytic Dataset for which you are searching. You can search on dataset name, source, and created date.
2. Any Analytic Dataset that has the same letter(s) or word(s) in their description, as those you enter in the search box, is displayed.
3. Backspace to clear the search and return to all results.

If no results are found, you can click in the box to create a new analytic dataset.

Deleting Analytic Datasets

To Delete an Analytic Dataset:

1. From the Analytic Datasets screen, select the check box next to the Analytic Dataset you want to delete. Selecting an Analytic Dataset enables the **Delete** button.
2. Once you have selected all of the Analytic Datasets to be deleted, click **Delete**. The Analytic Dataset is permanently removed from the database.

Once a file is deleted, it is not possible to recover it. The original client file must be uploaded and Analytic Datasets must be applied again.

Reports

Viewing Reports

To view reports on your Analytic Dataset, you much click on the row of the desired dataset Analytic Dataset Name in the list of your datasets, and a report drawer will open.

The following reports are available depending on your dataset:

- *Personicx*
- *Portrait*
- *Propensities*

Each report page gives you information about the dataset.

Personicx Report

The Personicx Report consists of two types of reports:

1. **Personicx Portrait Report**
2. **Personicx Scattergram Report**

Personicx Portrait Report

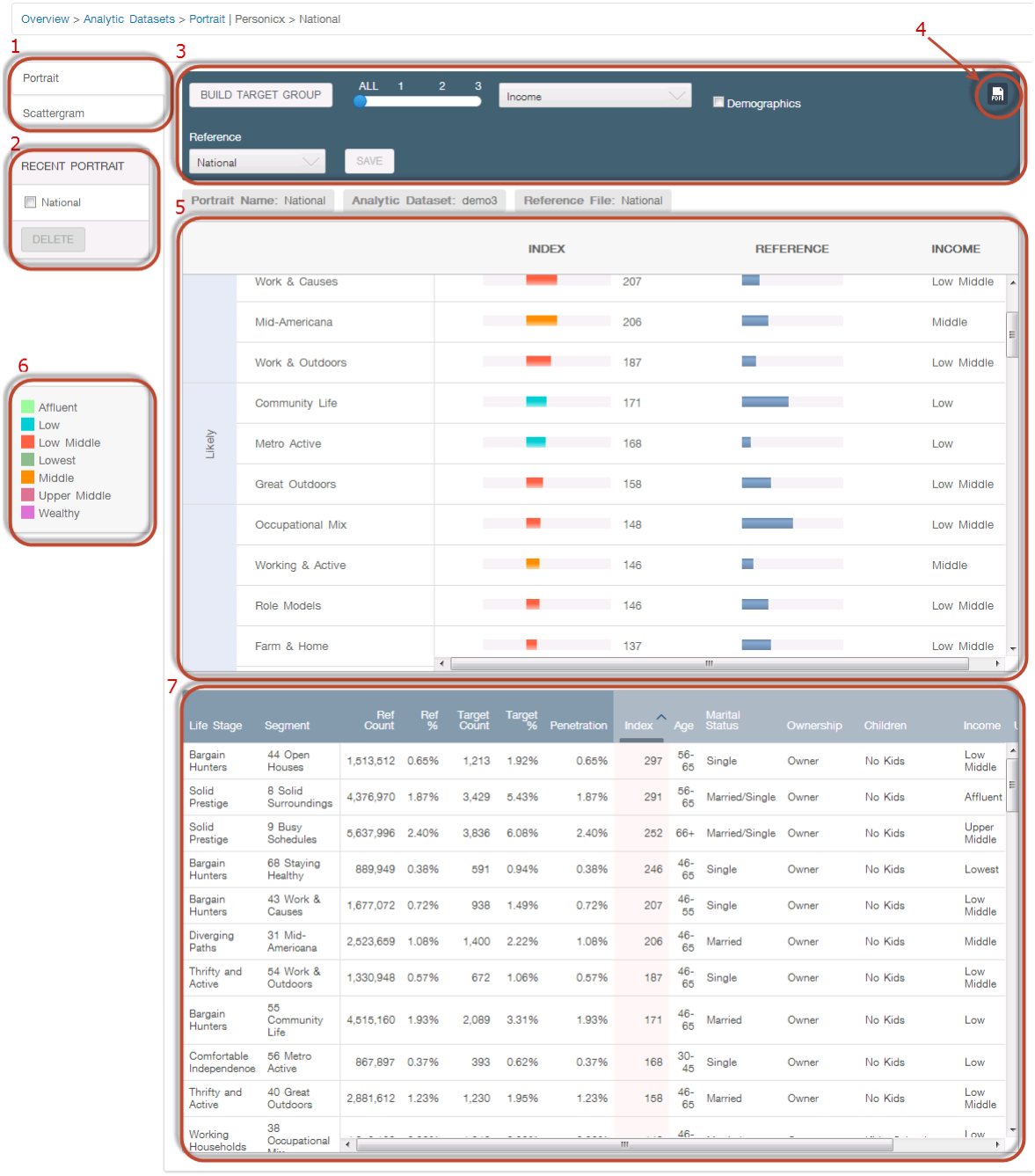
Personicx is a household-level consumer segmentation system created from the actionable marketing universe found in Acxiom's InfoBase and designed to segment all U.S. households according to the consumers' different stage of life and their associated consumer behaviors. The life stages range from young adults just starting out after school to people well into retirement age. There are 70 unique Personicx segments which can be studied at the segment level or rolled up into 21 life stage groups, each consisting of multiple segments.

Personicx Portrait reports compare the Personicx segment distributions of the Analytic Dataset File to either a national US reference population or to a specific behavior from a national reference population as reported by the MRI syndicated consumer survey. It details which of the population's Personicx clusters are more likely and less likely to contain households similar to the base reference population.

The intent of this analysis is to utilize Personicx to assist in gaining a better understanding of the life stages, interests, and characteristics of households contained in the Analytic Dataset File being studied. Clients can use the Analytic Datasets uncovered by the report to inform current and future marketing decisions.

To view the Personicx Portrait report, click the **Personicx** tile and select portrait from the left navigation.

The Personicx-Portrait Report consists of 7 main areas labeled in the graphic below:



1. **Report Tabs**

   The reports available are shown in the left navigation pane and are separated by tabs. Clicking on the tab for a specific type of report will display the report in the viewing area.

2. **Recent Portrait**

   Displays recent portraits built by you. This is only available for the Portrait report.

3. **Options**

   You can change various options to customize the report results to meet your needs. See the Options sections (of each individual report) for more details.

4. **PDF icon**

   You can export the report to PDF format to allow you to save it to your computer.

5. **Chart/Probability Index Table or SWOT Analysis Chart**

   Displays the results, based on the options selected, in a graphical view. A chart/probability index table will display for Portrait reports and a SWOT analysis chart will display for Scattergram reports.

6. **Key**

   The key gives the color representation of the segment characteristic selected.

7. **Portrait Table**

   Displays the results of the Portrait Report in a table view. When viewing the Scattergram report this table is referred to as Portrait Report.

Index Scores

Interpreting Index Scores

Indexes greater than 175 are highly likely

Indexes greater than 175 are generally considered to show significant over representation of a cluster in a sample population. It illustrates a possible strength or something unique about the sample being investigated.

Indexes 151 to 175 are Likely

Indexes ranging from 151 to 175 are generally considered to show significant over representation of a cluster in a sample population, although slightly less significant than those greater than 175. It illustrates a possible strength or something unique about the sample being investigated.

Indexes 100 to 150 are Average

Indexes ranging from 100 to 150 are generally considered to be average. In other words, the size of this cluster within the customer sample is not much different than the national distribution.

Indexes under 100 are Unlikely

Indexes less than 100 are generally considered to show significant under representation of a cluster in a sample population. It illustrates a possible weakness for an organization or indicates what portions of the marketplace are not as receptive to your corporate initiatives.

Count Bar Chart

The size of the bar chart in the Count column indicates the relative size of the particular cluster (number of consumers) found within the Acxiom consumer marketing database.

Types of Personicx Portrait Reports

The following two Personicx reports are currently available:

- National
- Survey Data

1. From the Analytic Dataset Files page, click the Analytic Dataset for which you want to view a report.
2. A drawer opens and the available report options are displayed.
3. Click on the image of the **Personicx** report.
4. Select the options on which you want to report. See the Portrait Report Options section below for more details.
5. Click **Apply**. A Chart/Probability Index table and Portrait table will display.

Portrait Report Options

Following are the options for Personicx reports.

Note: Many of the options are dynamically populated based on the selection made in the drop-list(s) preceding the drop-list being selected.

Build Target Groups

Target groups are combinations of Personicx clusters that form a super cluster. Clients can use the Portrait report to find and build new, custom target groups for further study or for use in marketing campaigns. Target groups are built directly from the Portrait page in the Analytic Dataset application.

Selecting the Build Target Group lets you give the target a name, enter an audience for the target group, select the demographics for the target group, and save the target group as well as view previously saved target groups.

Z-Score slider [All, 1, 2, 3]

The Z-Score slider lets you adjust the results based on the level of Z-score to which you slide the filter. Z-Scores are based on the distance between the raw score and the population mean in units of the standard deviation. If the raw score is below the mean, z is negative. If the raw score is above the mean, z is positive. Moving the slider will filter the records in the Personicx Portrait chart to ONLY include those records/rows with a Z---Score greater than the number on the slider.

For Example, if the user sliders the slider control to 3, then only those records with a Z---Score greater than 3 will be shown

Select a Segment Characteristic

The Select a Segment Characteristic option displays a list of demographics on which to base your report in a drop down box. Selecting a segment characteristic will add a column to the reports below.

Demographics

The Demographics option displays a list of demographics on which to base your report. Selecting the check box next to the Demographics option will display all of the demographics in the reports below. You can check or un-check demographics from the pop-up window as needed.

Reference

The Reference option displays two reference options (National and Survey Data) on which to base your report. When indexes are calculated the client file data is the numerator and the reference file data is the denominator. Survey Data uses MRI questions and data and the National is a national representative sample of InfoBase lists.

Category

The options for Category are displayed only when the Survey Data Reference is selected. The Category option displays the major categories used by the MRI survey to collect data about what consumers purchase or what consumers do.

Sub-Category

The options for Sub-Category are displayed only when the Survey Data Reference option is selected. The Sub-Category option displays a list of sub-categories that are a further break down of categories. Sub-categories cover behaviors and attitudes of how the consumer feels about their purchase, things they do, what they've read, etc.

Question

The options for Question are displayed only when the Survey Data Reference option is selected. The Question option displays questions, from the MRI survey, for the category and sub-category previously selected.

Response

The options for Response are displayed only when the Survey Data Reference option is selected. The Response option displays the responses, from the MRI survey, that were provided based on the category, sub-category, and questions selected in the previous drop-lists.

Apply

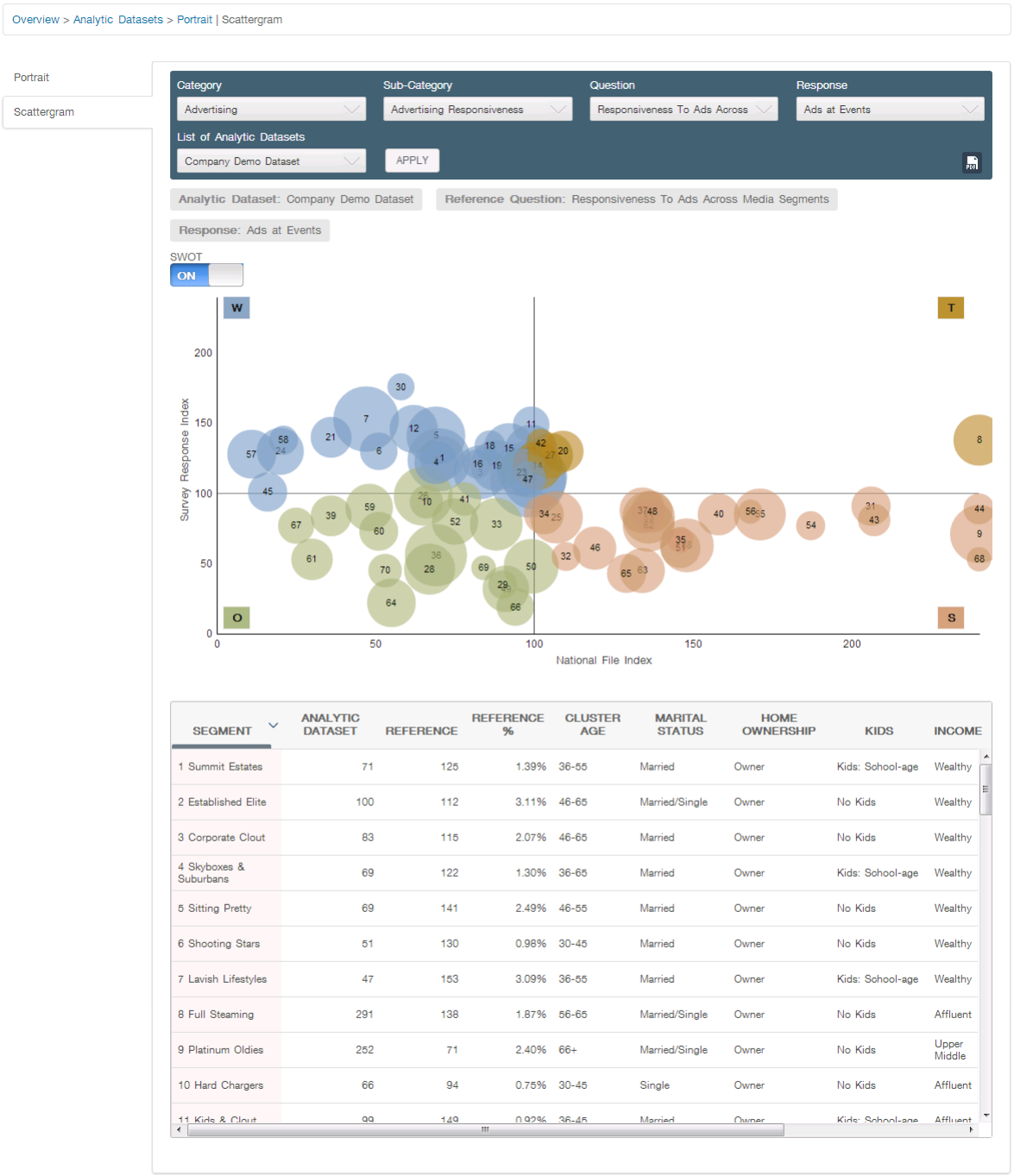
Clicking **Apply** applies the settings you select to the report.

Personicx Scattergram Report

A Scattergram or SWOT analysis creates and compares the indexes of an Analytic Dataset File to those of the total United States with the survey question relative to the overall population.

This chart compares two portraits' indexes relative to a common base for comparison. They Y axis is labeled in the top left corner of the chart, and the X axis is labeled in the bottom center of the chart.

The following is a sample graphic of a Personicx Scattergram report.



SEGMENT	ANALYTIC DATASET	REFERENCE	REFERENCE %	CLUSTER AGE	MARITAL STATUS	HOME OWNERSHIP	KIDS	INCOME
1 Summit Estates	71	125	1.39%	36-55	Married	Owner	Kids: School-age	Wealthy
2 Established Elite	100	112	3.11%	46-65	Married/Single	Owner	No Kids	Wealthy
3 Corporate Clout	83	115	2.07%	46-65	Married	Owner	No Kids	Wealthy
4 Skyboxes & Suburbans	69	122	1.30%	36-65	Married	Owner	Kids: School-age	Wealthy
5 Sitting Pretty	69	141	2.49%	46-55	Married	Owner	No Kids	Wealthy
6 Shooting Stars	51	130	0.98%	30-45	Married	Owner	No Kids	Wealthy
7 Lavish Lifestyles	47	153	3.09%	36-55	Married	Owner	Kids: School-age	Wealthy
8 Full Steaming	291	138	1.87%	56-65	Married/Single	Owner	No Kids	Affluent
9 Platinum Oldies	252	71	2.40%	66+	Married/Single	Owner	No Kids	Upper Middle
10 Hard Chargers	66	94	0.75%	30-45	Single	Owner	No Kids	Affluent
11 Kids & Clout	99	149	0.92%	36-45	Married	Owner	Kids: School-age	Affluent

Scattergrams compare ranked indices of two survey research or customer portraits on an "X/Y axis". The result is that each of 70 segments falls into one of these four areas on a grid with four quadrants:

1. Lower Left – Segments not likely to exhibit either behavior

2. Lower Right – Segments that are more likely to exhibit the behavior on the "X" axis than the behavior on the "Y" axis
3. Upper Left – Segments that are more likely to exhibit the behavior on the "Y" axis than the behavior on the "X" axis
4. Upper Right – Segments likely to exhibit both behaviors

These reports will be in two formats:

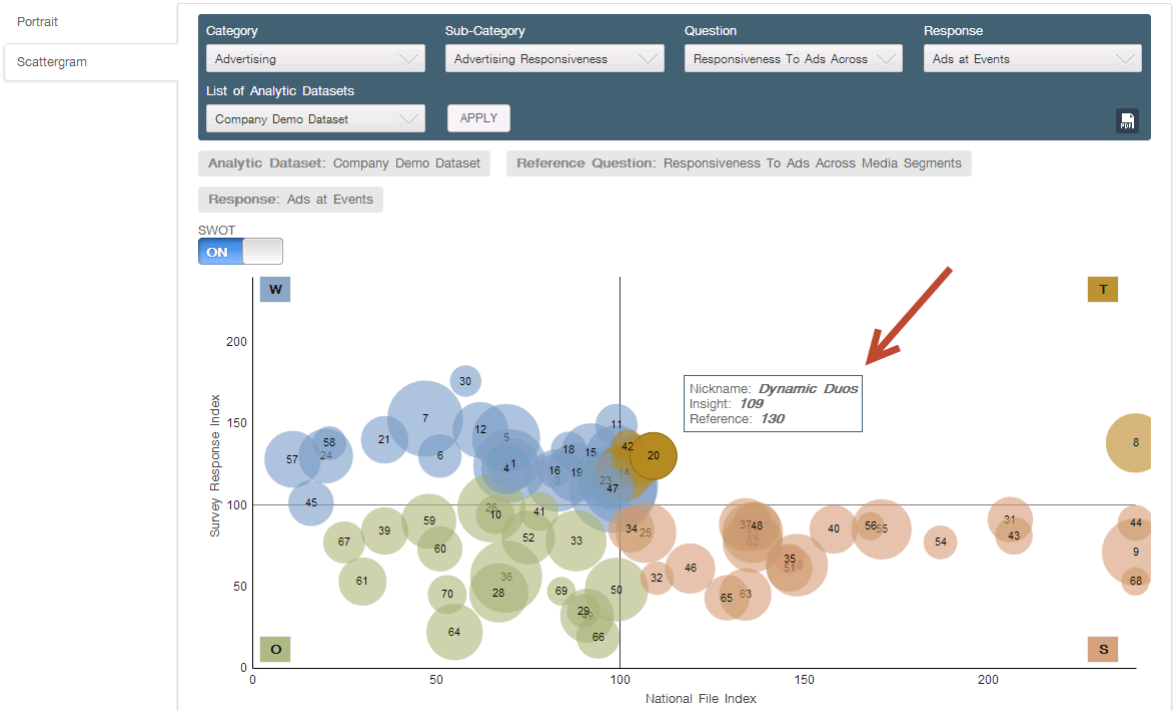
1. Portrait Comparison – the basic form described above
2. SWOT – roughly the same format except that the labels "S", "W", "O", "T" representing "Strength", "Weakness", "Opportunity" and "Threat" are applied to each quadrant as follows:
   a. "Strength" (Lower Right) considered a strength since these are segments likely to favor the brand on the "X" axis than the competitor on the "Y" axis
   b. "Weakness" (Upper Left) considered a weakness since these segments are more likely to favor the competitor on the "Y" axis rather than the one on the "X" axis
   c. "Opportunity" (Lower Left) since these segments are not likely to favor either competitor, there are opportunities to refine the product or message to acquire new customers
   d. "Threat" (Upper Right) that is used for the segments that favor either competitor and thus are a threat to be acquired by each.

Tool Tips Text

The tool tip feature explains the contents of the segment. To view the tool tip, hover over the desired Scattergram bubble. It will include:

- Segment Number – Segment Name
- X-Axis Index Value,
- Y-Axis Index Value
- Base Count (X-Axis) Number of Households (this will correspond to the size of bullet)

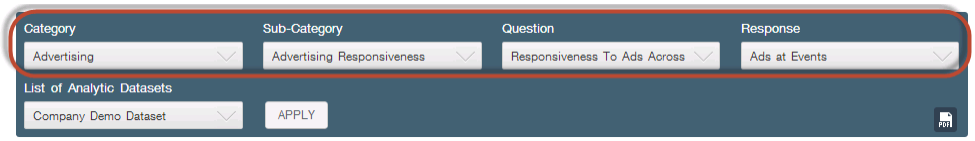
A screenshot showing tool tip text is shown below:



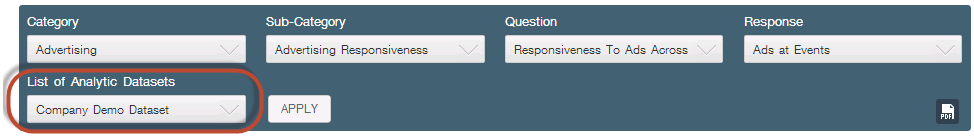
Scattergram Report Options

The following are the options for Personicx Scattergram reports.

The top row represents the Y axis on the Scattergram report. This is based on Survey Data.



The bottom row represents the X axis on the Scattergram report.



Y Axis Options

Category

The Category option displays the major categories used by the MRI survey to collect data about what consumers purchase or what consumers do.

Sub-Category

The Sub-Category option displays a list of sub-categories that are a further break down of categories. Sub-categories cover behaviors and attitudes of how the consumer feels about their purchase, things they do, what they've read, etc.

Question

The Question option displays questions, from the MRI survey, for the category and sub-category previously selected.

Response

The Response option displays the responses, from the MRI survey, that were provided based on the category, sub-category, and questions selected in the previous drop-lists.

X Axis Options

List of Analytic Datasets

The List of Analytic Datasets option displays a list of available Analytic Datasets based on user name. The Analytic Dataset you select will be displayed as the data on the X axis on the Scattergram.

Apply

Clicking **Apply** applies the settings you select to the report.

Portrait Report

The Audience Portrait report compares the InfoBase sourced demographic and lifestyle/interest characteristics of consumers within the Analytic Dataset File to the characteristics of consumers in a national reference population. The reference population contains a cross-section of randomly selected consumer records from the InfoBase Database. The result of the comparison is a list of characteristics can identify and distinguish your consumers in the Analytic Dataset .

The Audience Portrait reports consist of two stacked sections. The top section reports the top and bottom indexing values from the selected category via a graphical chart. The bottom section displays a complete tabular list of the values from the selected category-question combination.

In the tabular list report, characteristics on the left of each page are over-represented in the customer portrait; these characteristics identify your Analytic Dataset File records representing the customers you are studying. The list of characteristics on the right of each page, are under-represented in the customer portrait.

In the chart view the directions are reversed but the meanings are clear; characteristics indexing highly are on the top half and point to the right, and those indexing lower are on the bottom half and point to the left. The index value, associated with each characteristic, is a statistical comparison of the percent of households in the customer file possessing a specific characteristic, and the percent of households in the reference population possessing that same characteristic. Index values greater than 100 indicate characteristics that are over-represented, and index values less than 100 indicate characteristics that are under-represented.

To view the Portrait report, click the **Portrait** tile.

The Portrait report consists of two main areas shown in the graphic below:

Audience Portrait

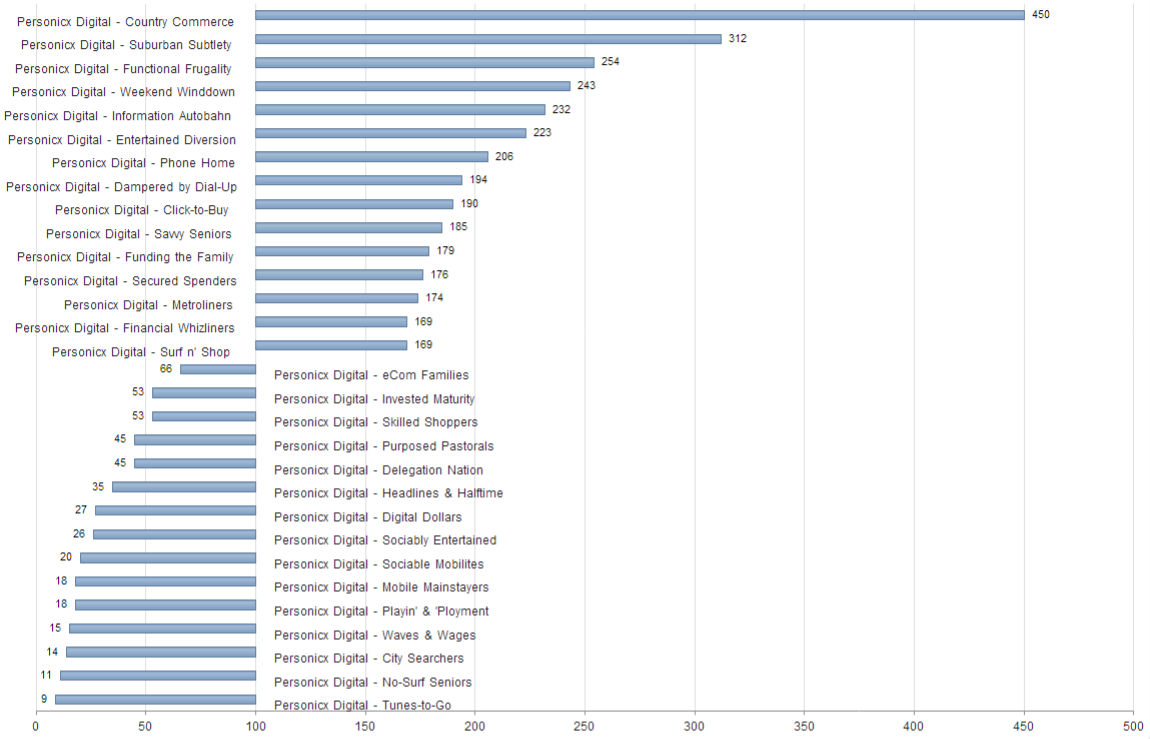
Overview > Analytic Datasets > Personicx | Portrait

Reference: US National | Target: Company Demo Dataset | Category: Personicx Digital | Question: Personicx Digital

1

Category Overview: Personicx Digital

Target: Company Demo Dataset | Reference: US National | Category: Personicx Digital



2

Question Detail: Personicx Digital

Target: Company Demo Dataset | Reference: US National | Question: Personicx Digital

	TARGET	BASE	INDEX
Personicx Digital	65,517	236,948,202	
No-Surf Seniors	0.53%	4.42%	11
Non-Tech Country	6.00%	3.58%	167
Traditional Channels	3.64%	2.18%	166
Invested Maturity	2.71%	5.06%	53
Savvy Seniors	2.54%	1.37%	185
Rural Restraint	4.91%	4.14%	118
Public Access	1.03%	0.83%	123
Delegation Nation	0.61%	1.34%	45
City Searchers	1.01%	6.82%	14
Suburban Subtlety	1.58%	0.51%	312
Dampered by Dial-Up	4.07%	2.10%	194
Downtown Downtimers	1.74%	1.76%	99
Big Country, Big Store	4.38%	2.76%	158
Dial-a-Friend	2.12%	2.22%	95
Purposed Pastorals	1.47%	3.21%	45
Secured Spenders	3.19%	1.81%	176
Posts & Purchases	8.00%	5.07%	157
Funding the Family	1.07%	0.60%	179
Country Commerce	4.25%	0.94%	450

1. **Category Overview**

   The Category Overview chart displays results based on all of the different question and response values within the category being studied. For example, if there are 30 different InfoBase fields in the demographic category and those 30 variables have 150 total responses, the report looks at all 150 of those different responses between the two files (the target and the reference), calculates for you which ones have the biggest difference both positive and negative, and displays the result in the chart.

2. **Question Detail**

   The Question Detail chart makes a comparison between the target and the reference for a specific question selected (e.g., Personicx Digital), and shows the distribution for that question on the client file and the distribution on the reference file; from there the index can be seen.

To View Audience Portrait Analysis Report Options

1. From the Analytic Dataset Files page, click the Analytic Dataset for which you want to view a report.
2. A drawer opens and the available report options are displayed.
3. Click on the image of the **Portrait** report.
4. Select the options on which you want to report. (see Report Options section below)
5. Click **Apply**. A Category Overview chart and Question Detail table will display.

Following are the options for Audience Portrait Analysis report.

Reference

The Reference option displays National Data on which to base your report. When indexes are calculated the client file data is the numerator and the reference file data is the denominator. The National reference is a national representative sample of InfoBase lists.

Target

The target drop down list will display Analytic Datasets that have been built, named and saved in previous screens. You may switch Analytic Datasets by simply selecting a different one from this option rather than needing to navigate back to the list.

Category (categories of InfoBase data available)

The Category option displays the major InfoBase categories available for describing your Analytic Dataset file. Detailed results for Category are displayed in the Category Overview chart. The Geographic and Propensities categories will generate different reports than

described in this section. You can view an example of a Geographic report below. If you select the category, Propensities, you will view a *Propensities Report*. You may return to the Audience Portrait Report by simply selecting a different category.

Question

For some categories, the Question option displays more detailed InfoBase elements that can be used in describing your Analytic Dataset. Detailed results for Question are displayed in the Question Detail chart.

Example of an Audience Portrait-Geographic Report:

The Geographic Report shows the distribution of index values from your Analytic Dataset compared to the National Reference File on a map of the United States with detail at the state level. You access the Geographic Report by selecting that category option. By hovering your mouse over a state, you will see the index value of that state. The colors represent the relative index ranking amongst states with a legend to guide your interpretation.

The following is a screenshot of an Audience Portrait-Geographic report:

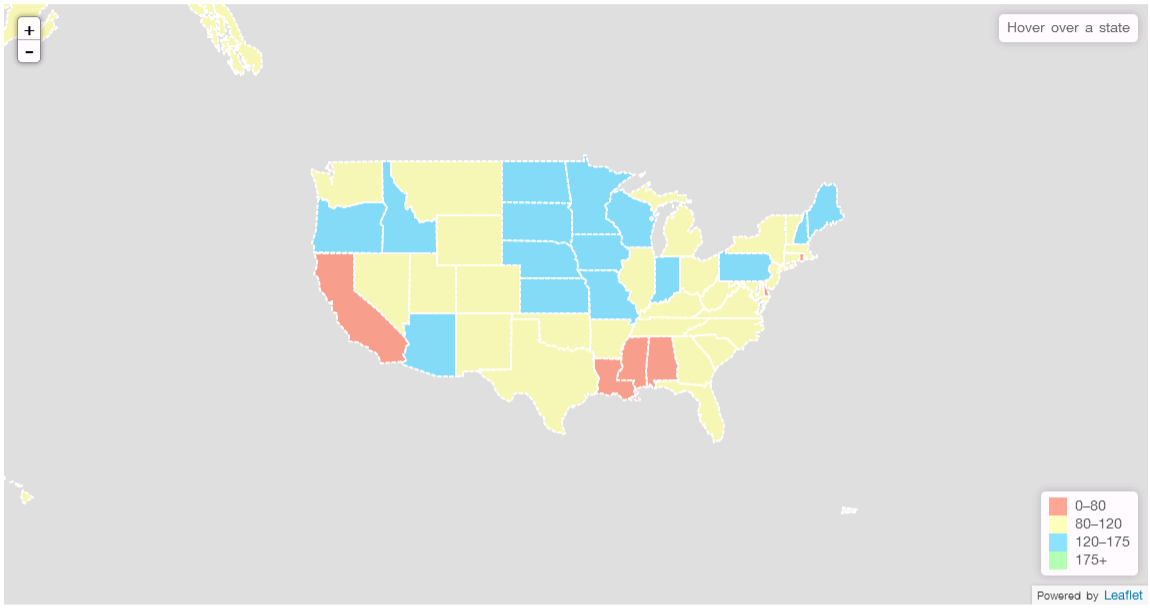
Audience Portrait

Overview > Analytic Datasets > Personicx | Portrait

Reference: US National | Target: Company Demo Dataset | Category: Geographic

Category Overview: Geographic

Target: Company Demo Dataset | Reference: US National | Category: Geographic



Question Detail: STATE

Target: Company Demo Dataset | Reference: US National | Question: STATE

	TARGET	BASE	INDEX
state	65,517	236,841,037	
Wyoming	0.18%	0.18%	102
Wisconsin	2.56%	2.02%	126
West Virginia	0.63%	0.60%	105
Washington	2.56%	2.13%	120
Virginia	2.40%	2.55%	94
Vermont	0.22%	0.22%	103
Utah	0.77%	0.85%	90
Texas	6.55%	7.39%	88
Tennessee	1.95%	2.09%	93
South Dakota	0.32%	0.25%	128
South Carolina	1.24%	1.48%	83
Rhode Island	0.31%	0.39%	79
Pennsylvania	5.42%	4.14%	130
Oregon	1.74%	1.22%	142
Oklahoma	1.30%	1.26%	103
Ohio	4.99%	4.29%	116
North Dakota	0.27%	0.21%	130
North Carolina	2.87%	3.48%	82
New York	6.34%	6.59%	96

Propensities Report

The Audience Propensity report compares Acxiom's pre-built Audience Propensities of customer households within the Analytic Dataset File to the propensities of households in a national reference population. The reference population contains a cross-section of randomly selected household records from the InfoBase Database. The result of the comparison is a list of propensities that can identify and distinguish your customer households in the Analytic Dataset .

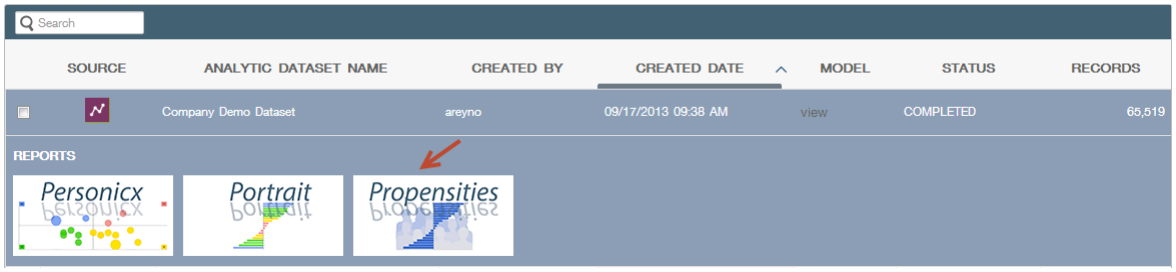
Audience Propensity reports use charts and diagrams combined with tabular lists to show the characteristics and their associated index values, grouped by high level category, that distinguish the customer households from households in the reference population.

In the tabular list report, propensities on the left of each page are over-represented in the propensity portrait; these propensities identify your Analytic Dataset records representing the customers you are studying. The list of propensities on the right of each page, are under-represented in the propensity portrait.

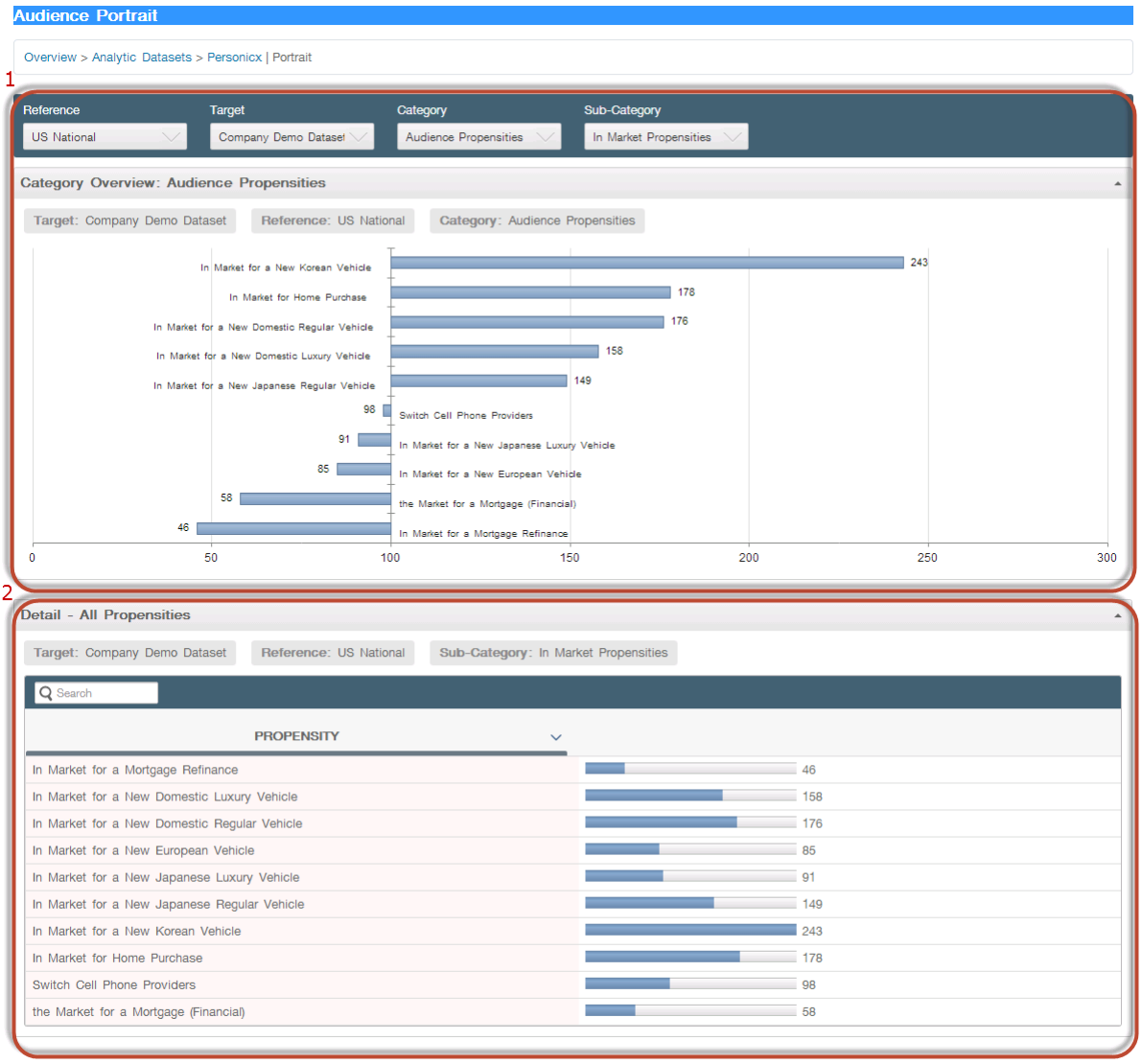
In the chart view the directions are reversed but the meanings are clear; propensities indexing highly are on the top half and point to the right, and those indexing lower are on the bottom half and point to the left.

The index value, associated with each characteristic, is a statistical comparison of the percent of households in the customer file possessing a specific propensity, and the percent of households in the reference population possessing that same propensity. Index values greater than 100 indicate propensities that are over-represented, and index values less than 100 indicate propensities that are under-represented.

To view the Audience Propensities Report click the **Propensities** tile.



The Propensities report consists of two main areas shown in the Audience Portrait graphic below:



1. **Category Overview**

   The Category Overview chart is pre-set to display Audience Propensities. The butterfly chart automatically calculates and displays the top and bottom 15 propensities that index the highest for your current Analytic Dataset File. All the remaining Audience Propensities are available for analysis by selecting the Sub Category option.

2. **Detail**

   The Sub Category drop-down option displays the seven major types of Acxiom pre-built Audience Propensities: In-Market, Attitude and Behavior, Brand, Product, Channel, Spending and Media Usage. The Sub-Category Detail chart makes a comparison between

the target and the reference for a specific sub-category selected (e.g., In-Market Propensities), and shows the distribution for that sub-category on the client file and the distribution on the reference file; from there the indices can be seen.

To View Audience Portrait Analysis Report Options

1. From the Analytic Dataset Files page, click the Analytic Dataset for which you want to view a report.
2. A drawer opens and the available report options are displayed.
3. Click on the image of the **Propensities** report.
4. Select the options on which you want to report. (see Report Options section below)
5. Click **Apply**. A Category Overview chart and Question Detail table will display.

Audience Propensities Report Options

The following are the options for Audience Propensities report.

Reference

The Reference option displays a National reference on which to base your report. When indexes are calculated the client file data is the numerator and the reference file data is the denominator. The National reference is a national representative sample of InfoBase List.

Target

The target drop down list will display Analytic Datasets that have been built, named and saved in previous screens. You may switch between Analytic Datasets by simply selecting a different one from this option rather than needing to navigate back to the list.

Category

The Category option is pre-set to display Audience Propensities. The butterfly chart automatically calculates and displays the top and bottom 15 propensities that index the highest for your current Analytic Dataset File. You may switch categories to the Geographic and Portrait categories which will generate different reports than described in this section.

Sub-Category

The Sub Category drop-down option displays the seven major types of Acxiom pre-built Audience Propensities: In-Market, Attitude and Behavior, Brand, Product, Channel, Spending and Media Usage. Selecting a sub-category displays two types of charts: the first is the top and bottom fifteen highest indexing propensities; the bottom chart displays all the propensities and their calculated indices. In this bottom section you can use the search function to identify specific propensities within a particular sub-category.

Models

The Models application gives you the ability to quickly and easily work with predictive models in your analytic sandbox environment with little more than a few clicks of the mouse. In addition to the extensive Acxiom Audience Propensities catalog, (available in the Audience Portrait application for evaluation and purchase), you can also create a look-alike model.

Look-alike models are used to find larger audiences of consumers possessing characteristics similar to your best customers, or perhaps the characteristics of any segment in which you have an interest. Upload a file, create an analytic dataset from it, step into the modeling center, and choose build a look-alike model. Your model is automatically created and you're provided with Lift Charts and Cumulative Gains Table reports to help you evaluate its performance.

Overview Screen

The Overview screen can be accessed by navigating the breadcrumbs within the application. From the Overview screen, you can View Analytic Datasets, create Analytic Datasets, Learn about Models, Read what's new in Audience Portrait, and view your recent Analytic Datasets.

The following is a screenshot of the Audience Portrait Overview page.

Tiles:

Acxiom Analytics

The Acxiom Analytics tile provides a **View Analytic Dataset** link and also a **Create Analytic Dataset** link.

Creating Analytic Datasets

The Creating Analytic Dataset tile gives a brief description of the creating Analytic Dataset functionality.

Building Models

The Building Models tile gives a brief description of what the build models functionality allows you to do and links to a document describing the modeling technique used through the **Learn About Models** text located in the lower right corner of the tile.

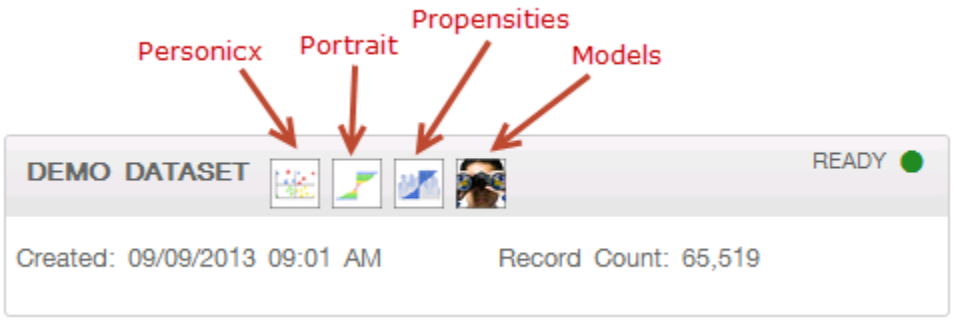
What's New

The What's New tile gives a brief description of what new functionality is now available in Audience Propensities and provides a link to a document with more details, through the **Details** text located in the lower right corner of the tile.

Recent Analytic Dataset

The Recent Analytic Dataset section displays the status of the most recent files that have been uploaded, by the client, through the Audience Architect-Data application for Analytic Dataset processing. Each of the Analytic Datasets in this area will also have a creation date/time stamp as well as the number of records in the Analytic Dataset file.

If you have recent Analytic Datasets displayed, the icons next to your dataset name will take you directly to reports or models that you previously created and that are associated with that dataset.



If no recent analytic datasets are displayed, click in the box to create an new analytic dataset.

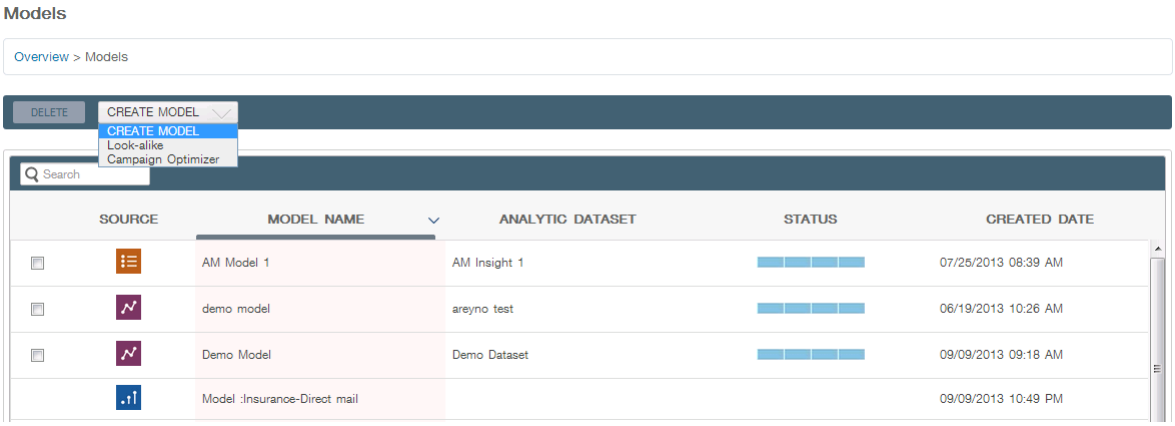
Creating Models

To create a Model you must click the create model button and choose which model type you would like to create from the drop down list shown below.

Types of Models Available

1. Look-alike Models
2. Campaign Optimizer Models

The following is a screenshot of the Models page with example models:



Look-alike Models

Look-alike models are used to find larger audiences of consumers possessing characteristics similar to your best customers, or perhaps the characteristics of any segment in which you have an interest. Lift Charts and Cumulative Gains Table reports are provided to help you evaluate model performance.

Creating a Look-alike Model

1. From the Model List tab, click **Create Model**.
2. Select **Look-alike** from the drop-down list.
3. Select the Analytic Dataset file you want to use for your model. If you have not created a dataset, you must do that first. See *Creating Analytic Datasets* for information on that topic.

4. In the New Model Name box, enter a name for your model.
5. Click **Build Model**.

Only national representative reference file is currently available for use in building reliable look-a-like models; configuring regionally representative reference files are planned for a future release.

Campaign Optimizer Models

1. From the Propensity Models page, click **Add**.
2. Click a radio button to select a **Propensity Model Group**: Offer-Channel or Product-Channel Type.
   a. For Offer-Channel models, click the selection box for one Offer and one Channel.
   b. For Product-Channel Type models, click the selection box for one Product and one Channel Type.
3. Click **Next**.

   NOTE: If the model already exists, you will be asked whether or not to update it. Models cannot be duplicated.

4. To create a **Propensity Formula** in the available field, use the controls underneath the Propensity formula field:
   a. Enter a value into the **Value** field and click **Add**.
   b. Select an operator from the drop-down menu and click **Add**.
   c. Click the arrow next to any group of Variables to expand the list. Click the selection box for a variable and click **Add Variable**.

      NOTE: The table of variables is pre-populated with existing propensity variables. To add a new variable to this list, see Adding New Propensity Variables

5. Enter a **Description** into the available field.
6. Click **Save**.

Viewing Models

Inside the Models application you can view all models associated with your login. They are all listed alphabetically on the page.

You can view the following information on your Model:

- Source
- Model Name
- Analytic Dataset
- Status
- Created Date

Source

Under the Source heading hover over the icon to view your Model Source. These icons represent the source application from within the audience platform that supplied the model.

The following is a list of source graphics and their representations:

 Cross Channel Planner

 Campaign Optimizer

 Analytics

Model Name

This is the given Model name assigned by the user. Click the arrow beside Model Name to change the order from ascending to descending.

Analytic Dataset

This is the analytic dataset associated with the Model Name.

Status

Displays the most current status of the Model. The status bar populates as the Model creation completes.

Created Date

Shows the date and time stamp for when the Model was created.

Searching Models

Search Models

1. In the Search field , enter the search criteria of the Model for which you are searching. You can search on the text and image fields of a model name, dataset name, source, and created date.
2. Any Model that has the same letter(s) or word(s) in their description, as those you enter in the search box, is displayed.
3. Backspace to clear the search and return to all results.

If no results are found, you can click in the Model list to create a new model.

Deleting Models

Delete Models

1. From the Models page, select the check box next to the model you want to delete. This enables the delete button.
2. Click **Delete**. (Campaign Optimizer models may only be deleted from within the Optimizer Application, not within Models)

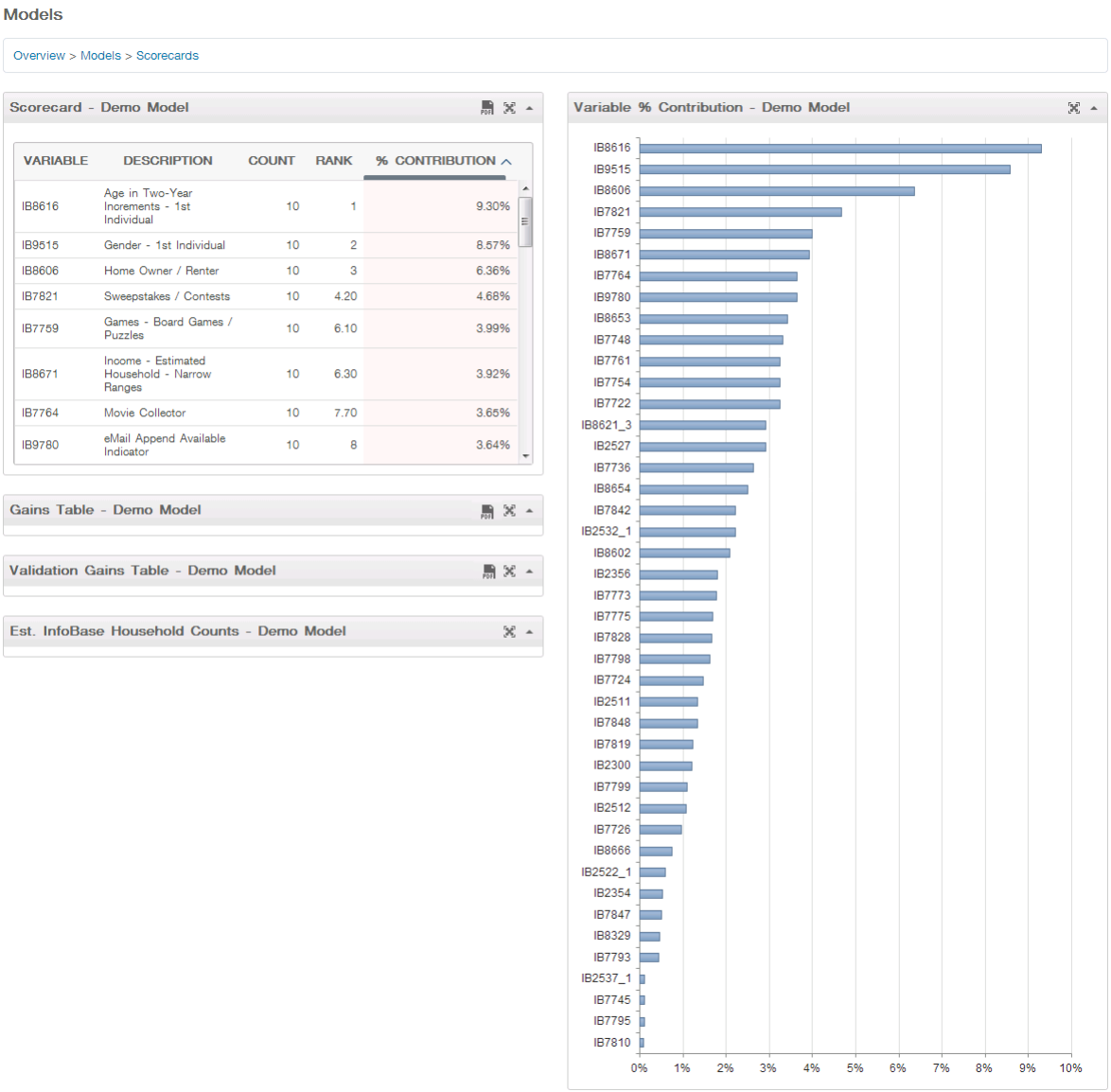
Once a model is deleted there is no way to retrieve it. It would have to be recreated.

Evaluating Model Performance

Using the Model Scorecard Page

The Models page displays a list of models associated with the User Name as well as the reports available. By clicking on a Model name, the Scorecard is displayed.

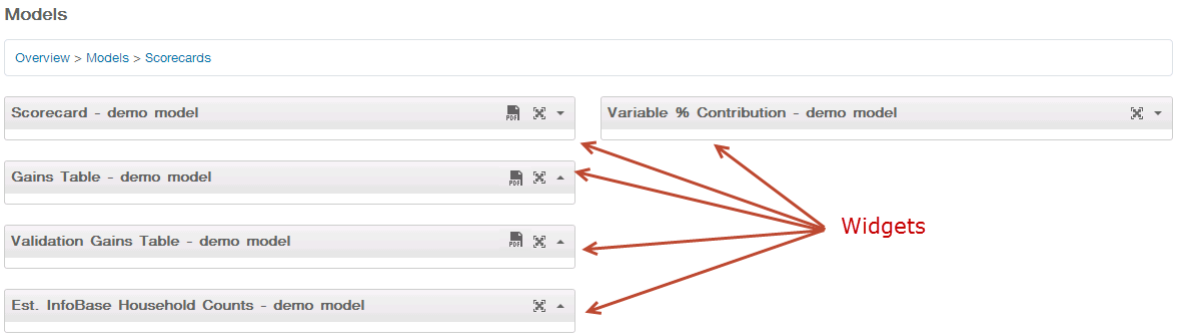
The following is screenshot of a Models scorecard.



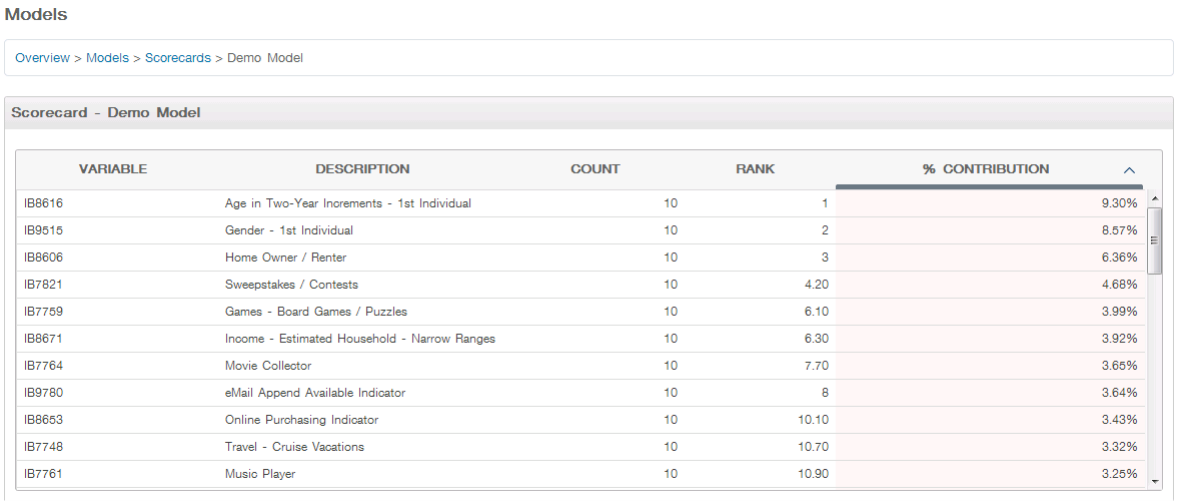
Using Model Report Widgets

When you first access the Models page, the widgets may or may not be expanded. You can move the widgets around the page by dragging and dropping them. The widgets can be collapsed or expanded. You can also export your scorecards in PDF format by clicking on the PDF icon in a widget.

The PDF export option is not available on the Est. Infobase Household Counts or Variable % Contribution scorecards.

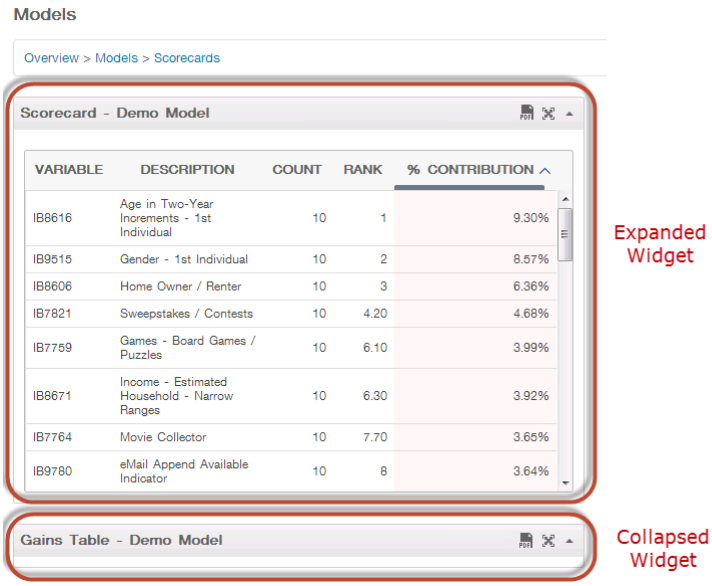


You can view the reports in a separate page by clicking on the expand icon . This will display the report in a new page. To return to the Models page, click the back arrow on your browser.



VARIABLE	DESCRIPTION	COUNT	RANK	% CONTRIBUTION
IB8616	Age in Two-Year Increments - 1st Individual	10	1	9.30%
IB9515	Gender - 1st Individual	10	2	8.57%
IB8606	Home Owner / Renter	10	3	6.36%
IB7821	Sweepstakes / Contests	10	4.20	4.68%
IB7759	Games - Board Games / Puzzles	10	6.10	3.99%
IB8671	Income - Estimated Household - Narrow Ranges	10	6.30	3.92%
IB7764	Movie Collector	10	7.70	3.65%
IB9780	eMail Append Available Indicator	10	8	3.64%
IB8653	Online Purchasing Indicator	10	10.10	3.43%
IB7748	Travel - Cruise Vacations	10	10.70	3.32%
IB7761	Music Player	10	10.90	3.25%

You can expand and collapse the widgets to view them on the Models page by clicking the up ▲ and down ▼ arrows.



Evaluating Campaign Optimizer Models will render the detailed parameters of the model equation.

Model Reports

There are different types of reports, charts and tables displayed on this page:

- Scorecards
- Variable's Percent Contribution Chart
- Cumulative Gains Chart
- Lift Chart
- Gains Table
- Validation Gains Table
- Estimated InfoBase Audience Counts Chart

Model Reports

Scorecard

The Model Score Card helps you understand the relative importance of each variable specified in the model. The modeling build process uses an ensemble technique, so for each dependent variable, ten models are built from ten random samples.

The Score Card summarizes the number of times each variable has been statistically included in one or more of ten ensembles, the average rank of the variable (1=top rank)across one or more of the ten ensembles, and the relative contribution each variable contributes to the model.

Report Columns

Following are descriptions of each of the report column headings.

Variable

A variable is an InfoBase element (e.g., IB2009).

Description

Description is an interpretation of the variable. It is more descriptive than IB2009.

Count

The count is the number of times a specific variable was included in one or more of the ten ensemble models.

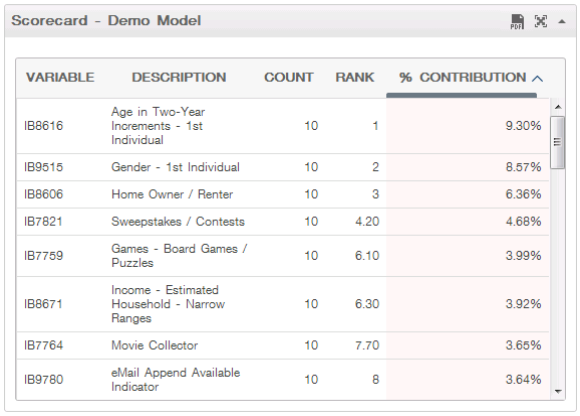
Rank

The rank is the stepwise order in which the variable enters into one or more of the ten ensembles.

%Contribution

% Contribution is the result of first calculating the Absolute Contribution of each variable in each model as ABS (Standardized Estimate)/Sum of ABS (Standardized Estimates). Then, calculating the Total Absolute Contribution of each variable, for all models, as the sum of the Absolute Contributions for that variable divided by the number of models. It shows the relative explanatory power of the variable across one or more of the ten ensemble models: these percent contributions sum to 100%.

The following is a sample of the Scorecard for Model report.



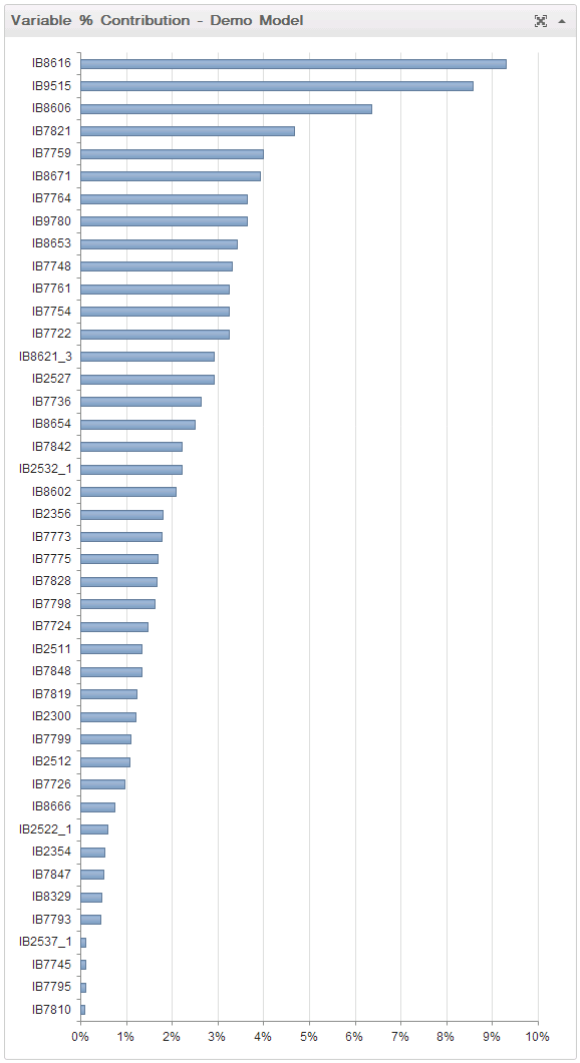
Scorecard - Demo Model

VARIABLE	DESCRIPTION	COUNT	RANK	% CONTRIBUTION
IB8616	Age in Two-Year Increments - 1st Individual	10	1	9.30%
IB9515	Gender - 1st Individual	10	2	8.57%
IB8606	Home Owner / Renter	10	3	6.36%
IB7821	Sweepstakes / Contests	10	4.20	4.68%
IB7759	Games - Board Games / Puzzles	10	6.10	3.99%
IB8671	Income - Estimated Household - Narrow Ranges	10	6.30	3.92%
IB7764	Movie Collector	10	7.70	3.65%
IB9780	eMail Append Available Indicator	10	8	3.64%

Variable's Percent Contribution Chart

The Variable's Percent Contribution chart helps you visually determine the importance each variable contributes to the overall model. It also provides a model portrait of your target audience.

The following is a sample of the Variable's Percent Contribution chart.



Cumulative Lift and Gains Charts

Key Points for Cumulative Gains and Lift Charts

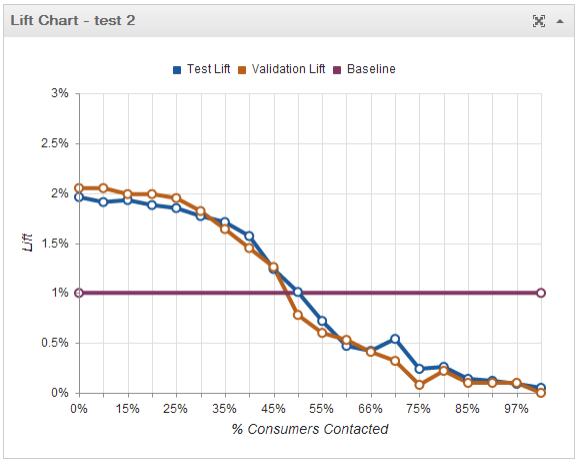
- Lift is a measure of a predictive model's effectiveness and is calculated as the ratio between the results obtained with and without a predictive model
- Both the cumulative gains and lift charts are visual aids for measuring a model's performance
- Both charts contain a lift curve and a baseline
- The greater the area between the lift curve and the baseline, the better the model

Lift Chart

A Lift Chart shows the actual lift produced from using a model. The points on the lift curve are determined by calculating the ratio between the result predicted by the model and the result using no model. The lift chart shows how much more likely you are to receive positive responses than if you just contact a random sample of customers.

As with any model development practice, Acxiom establishes a model build sample(s) and a holdout sample for immediate validation of the models using standard best practices: two almost identical lift curves indicate the model is well validated.

The following is a sample of the Lift Chart.



Cumulative Gains Chart

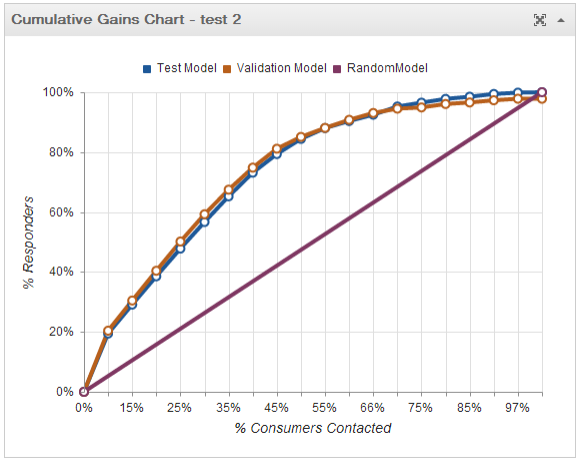
The Cumulative Gains Chart helps you visually determine how effective you can be by selecting a relatively small number of consumers while getting a relatively large portion of the responders.

- The Y-axis shows the percentage of total possible positive responses.
- The X-axis shows the percentage of consumers contacted, which is a fraction of all consumers.
- The Baseline or Random line in the Gains Chart represents the average or overall response rate - contacting X% of customers will produce Y% of the total positive responses.
- The Test Model lift curve represents the likely percent of responders for each percent of consumers contacted – contacting X% of customers will produce Y% of the total positive responses.
- The Validation Model lift curve represents the likely percent of responders for each percent of consumers contacted – contacting X% of customers will produce Y% of the total positive responses.

The greater the area between the two lift curves and the Random Model (baseline), the more the model is able to concentrate likely responses in the top deciles. The chart below shows how much more likely it is to receive responses from consumers selected from a predictive model than if you contact a random sample of consumers.

As with any model development practice, Acxiom establishes a model build sample(s) and a holdout sample for immediate validation of the models using standard best practices: two almost identical cumulative gains curves indicate the model is well validated.

The following is a sample of the Cumulative Gains Chart.



Gains Tables

The Gains Table and Validation Gains Table represent another way of presenting how well your model is likely to perform. Gains tables are usually organized in deciles (10 breaks), demi-deciles (20 breaks) or centiles (100 breaks). These tables contain important information about the target group in which you have interest and a comparison reference group.

Report Columns

Following are descriptions of each of the report column headings for both the Gains Table and Validation Gains Table.

Rank

The gains table is organized into an equal number of breaks (e.g., Deciles or 10 breaks).

Lift

Lift Index is the (Target % within a break, divided by the Total Target Rate)*100: the total target rate is calculated as the Total Cum Target/Total Cum Total (the counts found in the last break of each of the two columns respectively). The Lift Index/100 by break is also used and plotted along the Y-axis of the Lift Chart.

Total

The total number of Target records + Reference records by breaks used in the modeling sample.

Cum Total

The total number of records in the first break + the total number of records in the next break.

Cum Total %

The total % of records in the first break + the total % in the next break which total to 100% across all breaks. The Cum Total% creates the X-axis of the Lift Chart and the X-axis for the Cumulative Gains Chart.

Target

The total number of customers by break in your file.

Target %

Also known as Target Rate, this is the total number of your customers in a break / by the total number of records within a break.

Cum Target

Total number of customers in the first beak + the total number of customers in the next break.

Cum Ref

The total number of reference file records in the first break + the total number of reference consumers in the next break.

Cum Target%

The total target% for the first break+ the total target% for the next break which total to 100% across all breaks. The Cum Target% is also plotted up the Y-axis for the Cumulative Gains Chart.

Cum Ref %

The total % for the first break+ the reference % for the next break which total to 100% when cumulated across all breaks.

Lower Bound

The lowest model score for a particular break.

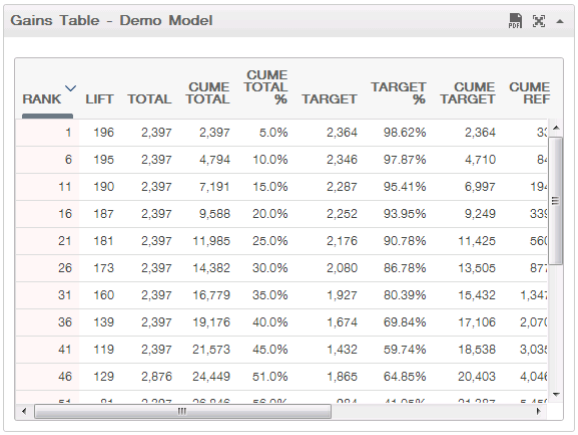
Upper Bound

The highest model score for a particular break.

KS

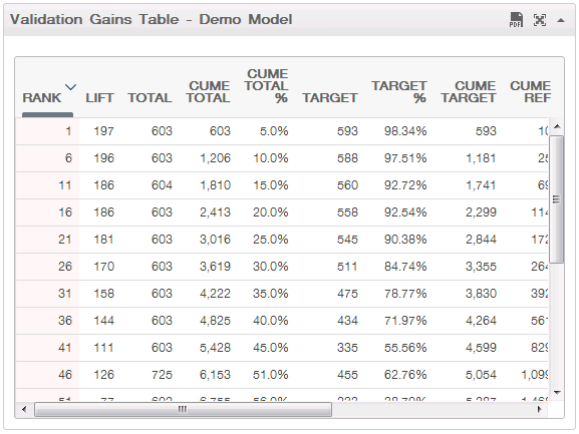
Stands for "Kolmogorov-Smirnov," a statistic that is a standard measure used in evaluating a model's ability to discriminate between the customer and reference file. In practice the range is generally from about 20 to 70: below 20 indicates questionable discrimination, above 70 is probably too good to be true.

The following are samples of the **Gains Table** and the **Validation Gains Table**.



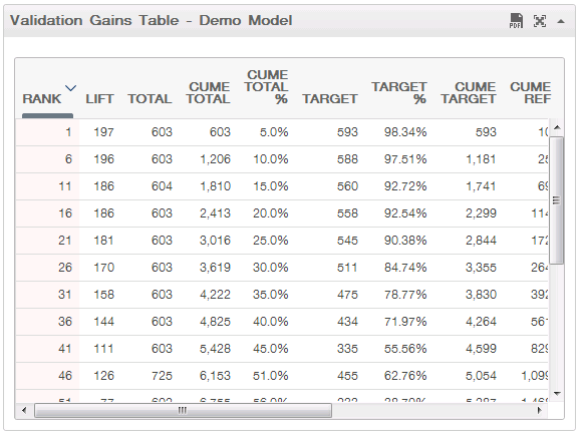
Gains Table - Demo Model

RANK	LIFT	TOTAL	CUME TOTAL	CUME TOTAL %	TARGET	TARGET %	CUME TARGET	CUME REF
1	196	2,397	2,397	5.0%	2,364	98.62%	2,364	3
6	195	2,397	4,794	10.0%	2,346	97.87%	4,710	8
11	190	2,397	7,191	15.0%	2,287	95.41%	6,997	19
16	187	2,397	9,588	20.0%	2,252	93.95%	9,249	33
21	181	2,397	11,985	25.0%	2,176	90.78%	11,425	56
26	173	2,397	14,382	30.0%	2,080	86.78%	13,505	87
31	160	2,397	16,779	35.0%	1,927	80.39%	15,432	1,34
36	139	2,397	19,176	40.0%	1,674	69.84%	17,106	2,07
41	119	2,397	21,573	45.0%	1,432	59.74%	18,538	3,03
46	129	2,876	24,449	51.0%	1,865	64.85%	20,403	4,04



Validation Gains Table - Demo Model

RANK	LIFT	TOTAL	CUME TOTAL	CUME TOTAL %	TARGET	TARGET %	CUME TARGET	CUME REF
1	197	603	603	5.0%	593	98.34%	593	1
6	196	603	1,206	10.0%	588	97.51%	1,181	2
11	186	604	1,810	15.0%	560	92.72%	1,741	6
16	186	603	2,413	20.0%	558	92.54%	2,299	11
21	181	603	3,016	25.0%	545	90.38%	2,844	17
26	170	603	3,619	30.0%	511	84.74%	3,355	26
31	158	603	4,222	35.0%	475	78.77%	3,830	39
36	144	603	4,825	40.0%	434	71.97%	4,264	56
41	111	603	5,428	45.0%	335	55.56%	4,599	82
46	126	725	6,153	51.0%	455	62.76%	5,054	1,09



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46	126	725	6,153	51.0%	455	62.76%	5,054	1,09

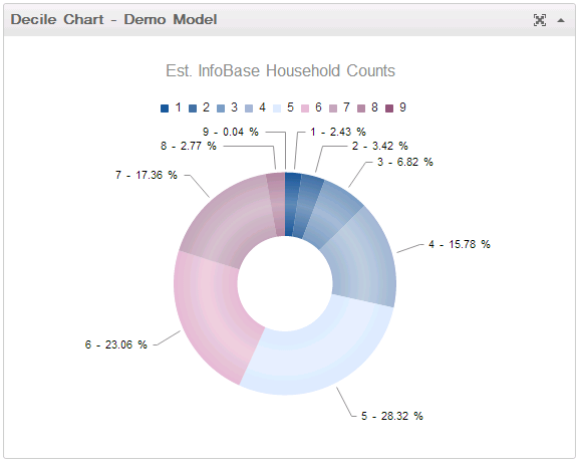
Estimated InfoBase Audience Counts Chart

The Estimated InfoBase Audience Counts chart displays the results of an InfoBase sample applied to a client model. This count shows an estimate of how many people from the InfoBase list match your model. It is displayed in deciles.

The following is a sample of the **Estimated InfoBase Audience Counts Chart.**

Est. InfoBase Household Counts - Demo Model

DECILE	HOUSEHOLDS	CUMULATIVE	PERCENT
1	3,431,500	3,431,500	2.43%
2	4,829,500	8,261,000	3.42%
3	9,632,300	17,893,300	6.82%
4	22,273,100	40,166,400	15.78%
5	39,986,500	80,152,900	28.32%
6	32,563,000	112,715,900	23.06%
7	24,513,700	137,229,600	17.36%
8	3,908,200	141,137,800	2.77%
9	51,900	141,189,700	0.04%



Report Columns

Following are descriptions of each of the report column headings for the Estimated InfoBase Audience Counts chart.

Decile

Displays the decile rankings. The highest scoring records are in decile one. The lowest scoring records are in decile ten.

Households

The estimated number of audience household consumers on the InfoBase file that match your model, for each decile.

Cumulative

A running total from decile to decile of the audience.

Percent

The percentage of the records on the InfoBase file that match your mode for each decile.

Glossary of Terms

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