

# CAPABILITIES





# **TESTING**

Compusense is a secure web-based Software as a Service (SaaS) solution for consumer and sensory data collection and analysis.

With one product, you can recruit and manage your panel, create user-friendly, customized questionnaires, collect data and run analyses on your sensory and consumer tests globally.

From a computer, smartphone, or tablet device, panelists can complete a questionnaire from anywhere with an Internet connection. As a mobile-optimized platform, the user experience is easy and enjoyable no matter the device. Analysts can analyze the collected data, gaining the necessary insight in making smarter business decisions.





# **SENSORY LAB**

Build your sensory lab with Compusense. Whether it's an existing or new panel, our user-friendly interface will put your panelists at ease so they can concentrate on testing. Working with descriptive panels? Decrease training time with our exclusive Feedback Calibration Method, Compusense FCM®.



# **CENTRAL LOCATION TESTING (CLT)**

Set up tests and then collect the data at a different location. If you are testing in a different time zone, use our time zone feature to ensure the tests are available at the correct time. Need to work with a supplier to conduct testing on your behalf? Eliminate data inconsistencies and labour costs by having your supplier collect data in Compusense using a test you create for them to run for you.



# HOME-USE TESTING (HUT) & POINT OF CONSUMPTION / USE

Panelists can complete product tests in the privacy of their own home, giving you greater reach in your results. Send reminder emails directly from the software and monitor when each panelist assessed a product using timestamps. You have complete control over when samples are available to be completed to ensure correct product usage.



# **CONSUMER SURVEYS**

Have your consumers complete questionnaires from anywhere in the world, even from their mobile device. Engage consumers by including images and videos in your questionnaires and use our smiley face scales for children. This is a great tool, especially for in-store or concept testing. Multimedia is hosted and streamed directly from our servers, ensuring confidential content is always secure.





# **BALANCED EXPERIMENTAL DESIGNS**

Experimental designs define the way that test samples are presented and distributed to panelists. Designs should be balanced across sessions and repetitions to help ensure the highest quality data. Compusense has more than 300 ready-to-use presentation designs, and the ability to create custom designs. Dynamic designs that adapt to the addition of samples also allow users to add samples to a running test without jeopardizing the quality of the data.

# **TESTING CAPABILITIES**

#### **QUANTITATIVE DESCRIPTIVE TESTS**

- Feedback for panel training can be provided to panelists using the Feedback Calibration Method®, exclusive to Compusense software.
- Supports a wide range of descriptive methods.

#### **CONSUMER TESTS**

- Includes Category questions (Intensity, Liking, Just-About-Right, Likert, Intent, Satisfaction, Photo Upload, etc.), Check-All-That-Apply (CATA), Choose N, Choose 1 (Yes/No, Agree/Disagree), open-ended comment questions, many others.
- Choice and attribute randomization is available, as is the ability to assign a design to choices.

#### **DIFFERENCE TESTS**

 Includes: 2-out-of-5, A-not A, Paired (2-AFC and 3-AFC), Degree of Difference (DOD), Difference from Control (DFC), Duo-Trio, R- index, Same/Different, Tetrad, Torgerson's, and Triangle question types.

#### **RANKING**

- Rank All, Rank N or Rank Preference question types.
- Can rank choices, concepts, images or products.

#### **TEMPORAL METHODS**

- Single and Dual attributes Time Intensity.
- TDS (Temporal Dominance of Sensations).
- TOS (Temporal Order of Sensations).
- Progressive Profiling with Line Scales.
- Temporal Check-All-That-Apply (TCATA).
- Multi-Attribute Time Intensity (MATI).

#### **OTHER METHODS**

- Projective Mapping / Napping with the option to customize the map background image.
- Sorting questions.
- Flash Profiling.

## **GLOBAL CAPABILITIES**

#### **GLOBAL COLLABORATION**

- Ideal for global clients with multiple locations and analysts.
- Share methods and data between analysts by using a common platform.
- Build a test in California, revise it in London and present it to panelists in India!
- Create templates to harmonize processes and ensure consistency.
- Work can be shared or kept separate across locations.
- Test in multiple languages. Allow panelists to select their native language for testing.
- Analysts can also view the software in their preferred language.

#### **WORLD-CLASS SECURITY**

- Software as a Service application hosted by a Tier III Data Centre.
- SOC 2 certified completed by external auditor.

## SSO

• We have SSO available for the analyst login.

#### API

- We have Data Export, Sample and Product APIs readily available.
- Custom APIs can also be created to meet your unique needs.



# **QUESTION TYPES**

#### 2-OUT-OF-5

 Panelists are presented with five samples (two of one sample, and three of another) and are asked to sort the samples into two groups based on similarity.

#### **CATEGORY INTENSITY**

 Panelists are presented with a scale of boxes and are asked to select a category on the scale that represents their perceived intensity of the attribute for each sample.

#### **CATEGORY LIKING**

 Panelists are presented with a hedonic scale of boxes and are asked to select a category on the scale that represents their liking of an attribute for each sample.

#### **CATEGORY PURCHASE INTENT**

 Panelists are presented with a scale of boxes and are asked to select a category box that represents their intent to purchase the sample product or product concept.

## **CHECK-ALL-THAT-APPLY (CATA)**

 Panelists are presented with a group of choices or concepts and are asked to select all choices that apply.

### **CHOOSE ONLY 1**

 Panelists are presented with a group of choices or concepts and are asked to select only one choice.

## **CONSTANT SUM**

 Panelists are presented with a group of choices and asked to assign number values that when added together, will not exceed a pre-set limit.

#### **FLASH PROFILING**

 Panelists will type their own attributes to describe a set of samples and then be prompted to rank the samples for each attribute they created.

#### **LINE SCALE**

 Panelists are presented with a horizontal or vertical line and are asked to select a point on the line that represents their perceived intensity of the sample attribute.

#### A-NOT-A

After panelists are familiarized with the test product (A), they
are presented with blind-coded samples and are asked to
determine if the presented sample is "A", or "Not A".

#### **CATEGORY LIKERT**

 Panelists are presented with a scale of boxes and are asked to select the degree to which they agree with the statement, ranging from, for example, "Strongly Disagree" to "Strongly Agree". The wording and number of boxes are customizable.

# **CATEGORY JAR (JUST ABOUT RIGHT)**

 Uses a bipolar scale with intensity anchors on the endpoints (e.g., "much too weak", "much too strong") and a mid-point anchor of "just about right". This scale can be used to guide product development for attributes such as colour appearance, aroma, texture, taste, etc.

#### **CATEGORY WHEEL**

 Panelists are presented with an attribute wheel. They are asked to select an attribute and select a category on the scale that represents their perceived intensity of the attribute.

### **CHOOSE N**

 Panelists are presented with a group of choices or concepts and are asked to choose a set number of choices. The n is set by the analyst.

### **COMMENT**

 Comment questions are used to gather panelist comments, observations, or demographic information, such as their name.

## **DUO-TRIO**

 Panelists are presented three samples. One sample is a reference, one sample is different from the reference, and the other is same as the reference. The panelist is asked to identify the sample that is the same as (or different from) the reference.

#### **FREE SORT**

 Panelists freely sort samples by creating groups, naming the groups (optional), and sorting the samples into the groups as they feel appropriate.

#### LINE SCALE WHEEL

 Panelists are presented with an attribute wheel. They are asked to select an attribute and select a point on the horizontal line that represents their perceived intensity of the attribute.



# **QUESTION TYPES**

#### LMS (LABELED MAGNITUDE SCALE)

 Panelists click a point on a vertical line scale that represents their perceived intensity of a sample attribute within the context of the strongest sensation they can imagine. The scale is anchored with the label "No sensation" to "Strongest imaginable" at the top.

# **PAIRED DIRECTIONAL (2-AFC)**

 Two samples are presented to the panelist and are asked to indicate which sample has the greater intensity of a particular characteristic. e.g., "Which sample is sweeter?"

## **PAIRED DIRECTIONAL (3-AFC)**

 Panelists are presented with three samples and are asked to determine the different sample based on a specified attribute.

## **PROJECTIVE MAPPING**

 Panelists are asked to organize samples, presented as labels and/or images, in a two-dimensional space according to perceived similarities and differences. Panelists may also be asked to tag samples, for example, to associate a series of samples with a common attribute or descriptor.

# **RANK N**

 Panelists are presented with a group of samples or concepts and are asked to rank a select number of the choices in order of perceived intensity or preference. For example, their top three. The n is set by the analyst.

# **SORT ALL**

 Panelists are presented with a group of samples or concepts and are asked to organize them all into bins.

# **TEMPORAL DOMINANCE OF SENSATIONS (TDS)**

 Panelists start a timer and then click the sensation choices that are perceived as most dominant during the sampling time. The analyst can customize the sampling time.

# **TEMPORAL ORDER OF SENSAITONS (TOS)**

 Panelists start a timer and are asked to click the sensations they perceive first, second and third during the sampling. The default for the maximum number of choices allowed is 3 but can be changed in the question options.

#### **NUMERIC**

The panelist is asked to enter their responses as a number.
The numbers can be formatted for Date, Date and Time,
Currency, Percentage, Number or General.

## **PAIRED PREFERENCE (2-AFC)**

 Panelists are given two samples and are asked to determine which sample they prefer.

#### **PHOTO UPLOAD**

- Panelists are asked to upload an image from their local computer or compatible device.
- Before uploading, panelists can review, replace, rotate, or even draw on the image (if the option is enabled by the analyst).
- Gather deeper consumer insights from panelists' perspectives.

#### **RANK ALL**

 Panelists are presented with a group of samples or concepts and are asked to rank all the choices in order of perceived intensity or preference.

#### SAME/DIFFERENT

 Panelists are presented with two samples and are asked to determine if they are the same or different.

#### **SORT N**

 Panelists are presented with a group of samples or concepts and are asked to organize some of them into bins. The n, or number of samples that must be binned, is set by the analyst.

# TIME INTENSITY (TI)

 A technique used to measure the rate, duration, and intensity of sensory attributes as a function of time. This technique is especially useful for measuring sensory qualities that display dynamic changes in intensity over short periods of time.

## **TEMPORAL CHECK-ALL-THAT-APPLY (TCATA)**

 Temporal CATA, just like traditional CATA questions, allows panelists to choose all choices that they perceive. Although, with TCATA, panelists are instructed to choose all that apply temporally in real-time, as they are perceived.



# **QUESTION TYPES**

### **TEMPORAL CATEGORY**

- Panelists are asked to rate the intensity or dominance of each attribute using a category scale of boxes.
- Questions can be set so all attributes are assessed at once, or one at a time and can also be used to collect data for TDS with magnitudes and MATI (Multi-attribute Time Intensity) data.

#### **TORGERSON'S**

 Panelists are presented with three samples - one reference, and two samples. The panelists are asked to choose the sample that is the most similar to the reference.

#### **TETRAD**

 Panelists are presented with a total of four samples, two of one sample and two of another. The panelists are asked to group the samples in what they perceive to be the two pairs.

#### **TRIANGLE**

 Panelists are given three samples; two are the same and one is different. Panelists are asked to choose the different sample.

# **PRODUCT MANAGEMENT**

#### **PRODUCT LIBRARY**

- Easily import product lists into the product library for quick access, tracking and organization.
- Use Product Groups to better organize products by category.
- Update and maintain product information all in one place.
- Create custom fields to best suit your product's specific qualities.
- Can be automatically populated by your internal system via the Product Library API.

#### **PRODUCTS OVER TIME**

- Quickly look for trends by graphing all your results for a product and even set a target or pass/fail criteria.
- Available for Category, Choose, Line Scale, LMS, or Numeric (non- calendar type) questions with results.

#### PRODUCT HISTORY REPORT

- View all tests a product has ever been included in.
- Export the results from all tests a product had been included in.

## **PANELIST MANAGEMENT**

### RECRUITMENT

- Recruit panelists on your website via an application form that is completely customized to your website and branding needs.
- Customize all fields, dropdown menus, and question options.
- Receive application form results directly to your panelist database in Compusense.

# **SCHEDULING**

- Based on responses to a screener questionnaire, panelists can be automatically qualified for a product test, where they can self- schedule for an available test time slot.
- Quotas can be used to only schedule the desired panelists (e.g., 50% male and 50% female respondents).
- Panelists can automatically reschedule themselves for available testing slots.
- Engage employee panelists by scheduling them for tests quickly and easily.

#### COMMUNICATION

- Analysts can communicate directly with panelists via integrated email.
- Individual panelists or groups of panelists can be contacted through the application.
- Need to remind panelists about an upcoming panel? Quickly and easily communicate with your entire panel using customized text called Wild Cards, and our simple mail merge function and schedule reminder emails to be send out at specific times.

# ASSESSOR TESTING (PERSONAL CARE, PROFESSIONAL AND PET TESTING)

- Assessors can be used to apply and evaluate products given to panelists.
- Schedule panelists on the fly for testing.
- Update panelist information on the Assessor website to ensure demographic information is correct before testing.

## **TRACKING**

- Analysts can reward panelists for participating in panels through an automated points system.
- Monitor your secure consumer database by reviewing graphs of the panel demographics and participation.
- Report on correct and incorrect responses for Triangle, Duo-Trio, DOD / DFC over time.
- Report on in-range responses for line scale and category questions, useful for Descriptive Analysis and Quality testing.



## **REPORTING**

#### STANDARD REPORT

- The Standard report is based on question type and your analyst defaults.
  - Defaults can be customized to suit your reporting needs.
- Report on the data from your test, including:
  - Scale Parameters
  - A crosstabulation table with counts
  - Percentage crosstabulation table
  - Counts, Means, Medians, p-values and Standard Deviations
  - t-test, ANOVA, Freidman's, etc. as appropriate
  - d' Analysis
  - Chi-squared Analysis (Same/Different)
  - Similarity Analysis for Triangle, Tetrad and Duo-Trio
- Binomial Distribution available for Triangle, Duo-Trio, Tetrad and Paired (2-AFC) tests.

#### **TOP BOX REPORT**

- Summarizes data for the top and bottom boxes in Category questions.
- Provides a crosstabulation table for each category/box from a selected attribute.
- An option for TURF Analysis
- The Top Box table(s) include:
  - Frequencies for the top and bottom boxes for each sample
  - Multiple Comparison test significance letters indicating if a significant difference was found.
- A mean table for each category attribute displaying Multiple Comparison Test significance letters.

#### **PANELIST SUMMARY REPORT**

- Can be used with select Category, Line Scale or Numeric attributes.
- Lists panelist scores for each attribute or sample.
- Includes panelist comments that correspond to the 'results at end of test' functionality.
- Also provides sample Means, Standard Deviation, and the total number of completed evaluations.

#### **PENALTY ANALYSIS**

- Used with tests that includes at least one Category Liking scale and one Category Just-About-Right scale.
- The flexibility to set your own thresholds.
- Report Includes:
  - Mean Drop charts and tables
  - Net Penalty graphs and tables

## **GENERAL SUMMARY REPORT**

- This report lists sample means for each attribute and identifies any significant difference.
- Customizable to include a variety of additional information fields.

### **POWERPOINT PRESENTATION**

- Exports a complete PowerPoint presentation (.pptx file) following the completion of a test.
- Includes graphical results for selected questions.
- Graphs are completely customizable and editable upon export.
- We can upload your own corporate PowerPoint template so each report comes out with your company logo and color scheme.

#### **CONSUMER REPORT**

- Demographic data in numeric form and charts.
- Split data on 1st position and demographic questions within your test or panelist library fields.
- Include up to 3 post-hoc tests.
- Includes comments.

# **COMMENT SORTING**

- Generate word tags to add to comments.
- Comments are sorted by word tags for each sample.
- Graphs are provided.

# PCA WORKBOOK

- PCA Means.
- Biplot Means.

#### **CUSTOMIZATIONS**

 We can create custom reports to meet your specific requirements for analysis and look and feel.



# **REPORTING**

# DESCRIPTIVE ANALYSIS WORKBOOK (EXCEL WORKBOOK – XLSX FILE)

- Provides a detailed analysis on panelists and product performance in a test.
- Available in quantitative descriptive (QD) tests with two or more samples and 6 or more attributes.
- Depending on selection, workbook sheets may include:
  - Product Summary
  - Attribute Summary
  - Attribute Breakdown
  - Product Mean Graphs
  - Panelist Consistency
  - Panelist Mean Graphs
  - Panelist Performance Summary
  - Crossover Scores
  - Scale Mean Usage
  - Panelist SD Table
  - Scale Range Usage Pearson's Correlation

- Panelist Card
- Attribute Performance Summary
- Correlation Table
- pvsMSE (Attribute)
- pvsMSE (Panelist)
- Panelist Mean Scores
- Panelist Performance Counts
- Panelist Rank Orders
- Rank Orders
- Rank Orders Graphs
- Panelist Results by Sample

# TEMPORAL ANALYSIS WORKBOOK (EXCEL WORKBOOK – XLSX FILE)

- TI Workbook:
  - Time Intensity Average Curves
  - Panelist Time Intensity Curves
  - TI-F
  - Time Intensity Parameters
- Temporal Choice Workbook:
  - Curves
  - Difference curves
  - Data proportions
  - TDS bandplots
- Data difference proportions.

# **ANALYSES**

# STATISTICAL TESTS AVAILABLE

- ANOVA (Analysis of Variance)
  - 2-wav
  - 2-way repeated measures (only with reps)
  - 2-way with interactions (only with reps)
  - 2-way mixed model with samples fixed and panelists random
  - 1-way
  - 1-way repeated measures
- Binomial Distribution for Triangle, Duo-Trio, Tetrad and Paired tests.
- Chi-squared Analysis (Same/Different).
- Cochran's Q.
- Co-occurrence Matrix (Free Sort).
- d'Analysis.
- Dissimilarity Matrix (Sorting).
- Duncan's Multiple Range at 90, 95 or 99% significance.
- Dunnett's at 90, 95 or 99% significance.
- Fisher's LSD at 80, 90, 95 or 99% significance.

- Friedman test.
- Goodman's Simultaneous Intervals.
- Marasculio's Procedure (Run with the Top Box Report).
- Studentized
   Newman-Keuls at 90,
   95 or 99% significance.
- t-test paired and unpaired.
- Tukey's HSD at 85, 90, 95 or 99% significance.
- TURF Analysis.
- Wilcoxon signed-rank test.

### **GRAPHING**

- Box Plots.
- Crosstabulations and mean scores.
- Principal Component Analysis (PCA) Graphing.
- Panelist Performance plots.
- Set graphing defaults to the graph style of your choice.

#### **USING FILTERING**

 Use the filtering tool to only analyze the data you want. Filter by demographic data, screener information, quota group, or sample specific responses.

#### **COMMENTS**

- Group panelist comments based on key words for sorting.
- Generate a visual text network of keywords to gain insights and patterns.
- Identify counts and graphs based on key words.
- Save word groups to apply to different questions and tests.
- Build a vocabulary that's easy to reference.



# **PANELIST PERFORMANCE**

#### HITS AND MISSES REPORT

- Used with Compusense FCM®, Feedback Calibration Methodology, to train descriptive panels, or with targets and ranges for samples.
- Shows which panelists were able to hit the acceptable target or range values on a line scale, category scale or choose only 1 question with frequency counts, as well as those who did not hit within the range.

#### PANELIST FEEDBACK

- For Discrimination questions, you have the option to provide panelists with feedback on whether they were able to correctly discriminate between the samples.
- Two display options: Immediately following the Question and End of Cycle.
- The end of the Cycle option causes any related follow-up Comment or Choose questions to be seen before the feedback is provided.

#### PANELIST PERFORMANCE REPORTS

 Provides the counts over time of correct evaluations, or evaluations that scored within the specified range for question types such Triangle, Duo-Trio or tests with targets and ranges.

#### SHOW PANELISTS RESULTS AT END

- For Qualitative Descriptive tests, you have the option to allow trained panelists to see their results at the end of a section in either tabular or graphical form.
- Allows a panelist to review their responses and the mean of all collected results immediately after data collection is completed.
- Panelists can emphasize values using the optional highlight function. You can allow your panelists to highlight based on multiples of the Mean, Range and/or Standard Deviations.
- Choose which questions you'd like to display to panelists at the end.
- A great tool for use during descriptive panel training.