

Making More Sense With Software

A brief look at available software for sensory analysis work Anny Dentener

What can sensory software do?

For different tests or better consumer insights relating to your products, tailor-made sensory evaluation software may help. You may not even need to purchase it but “pay as you go” using Internet-based systems, which can have benefits in terms of tax and avoiding IT hassles. So what can sensory design and analysis software help you with?

- Designing tests;
- Generating questionnaires (on paper or screen);
- Generating sample codes and labels;
- Collecting data from screen, paper code reader or manual entry;
- Statistical analysis;
- Generating reports;
- Storing results;
- Keeping track of panellist performance.

You do have some choice, with some packages offering linked help for “multivariate” data analysis.

Quick references

Need to get serious with your sensory evaluation? After all, good sensory market research is said to increase your chance for market success about five-fold! Software is at hand when your needs go beyond textbooks or tedious manual data entry. A handy spreadsheet helper (Sensory Nexus Library; www.sensory.org) avoids dyslexic 3-digit random number generation for your test samples, leaving out numbers such as 316 and 361 in the same experiment. If you need more support with analysis and are not afraid of statistics, a general stats package (some even available for free: see www.scientific-computing.com) may be your next step. For a stats refresher, check out Statsoft’s free Electronic Statistics Textbook (www.statsoft.com). For those really keen on sensory research and data analysis, visit www.sensometric.org where like-minded

people gather, as they do at the annual UK Pangborn Sensory Science Symposium (7-11 August 2005).

Compusense offerings

Compusense claims to be a world leader in computerised sensory analysis in the food, fragrance and personal hygiene industries. It has a mix of software products to help with planning, execution, and analysis of sensory testing with Compusense Five at the centre and a more recent tailor-made package for QC sensory. It links to Senstools for Multivariate Analysis and to Design Express for statistically valid designs. Compusense has hundreds of clients all over the world, including in New Zealand Fonterra Research, AgResearch and HortResearch.

SIMS

Sensory Information Management System (SIMS 2000) offers software for test design, execution, and analysis for Sensory and Marketing Research fields, including Consumer Testing and Surveys. Its world-wide clients include product manufacturers, market research firms, and service organisations from a variety of industries. It has a data link option with Camo Unscrambler for multivariate data analysis, with clients including Sanitarium Australia Health Food Company.

Biosystèmes

Biosystèmes designs and markets FIZZ to address all needs in sensory and consumer testing, including test design, judge management, automated data collection (on screen/paper), and integrated analyses. It claims 600 FIZZ licenses in the industry and academia worldwide, including local user Griffin’s Foods.

ABT Informatique

When visiting ABT Informatique’s website, polish up on your French, as at the time of writing the English pages were unavailable. ABT offers Tastel+ software for Data Entry and Analysis for sensory analysis and consumer testing. ABT operates mainly in Europe.



Figure 1: Easy selection guide in Guideline for sensory and development projects

Senstools/EyeQuestion

OP&P claims to be one of the first providers of sensory data-acquisition software (PSA-System/3) and specialised sensory data analysis software (Senstools). For more info, visit their website but get a Dutch dictionary out of the cupboard or activate the translator to make sense of some of it. You can download a demo for Senstools. Since 2002, OP&P collaborates with Logic8, a software company specialising in internet/intranet data collection. This has resulted in EyeQuestion, a web-based integrated reporting module that can be linked to external databases and software. You only need a browser to run experiments, either in-house or anywhere in the world and of course a computer screen for panellists. A demo on the site shows the building up and running of a survey, and report generation. Current clients include I.F.F., Philip Morris and Numico.

Others

Packages	Company	Indicative costs	Website
1. Compusense Five 2. Compusense QC	Compusense Inc	1. US\$7,500-\$20,000; 2. QC C\$15,499	www.compusense.com
FIZZ	Biosystèmes	Basic paper/scanner option €14,910; 8-14 PCs €16,800	www.biosystemes.com
1. Modde (DOE and some multivariate) & 2. Simca-P (MVA only)	Umetrics	1. Modde: US\$1,109 2. Simca-P: unknown	www.umetrics.com
Sims 2000 (sensory and consumer research)	Sensory Computer Systems	From US\$10,000	www.sensorysims.com
Tastel+(sensory evaluation incl. QC and panel evaluation)	ABT Informatique	Tastel+ options from €3,500	www.abt-sensory-analysis.com (Agent: Unimonde www.unimonde.com.au)
Senstools	OP&P Product Research	OP& P Senstools: €2,450	www.opp.nl/uk/software/senstools/senstools.html
EyeQuestion	Logic8	EyeQuestion: purchase Intranet €12,000 – 20,000 average system, 6-16 concurrent users or Internet lease: several options e.g. €500/month plus €2.50/panellist session.	www.Logic8.nl
Unscrambler	Camo	Unscrambler and Product Optimizer: tbc	www.camo.no (Agent: FoodTech Solutions www.fts.co.nz)

Unscrambler, Modde/Simca and Senstools offer multivariate data analysis by itself, via links to other software, or in combination with general statistical analysis. Camo recently launched the "Product Optimizer", a web-based service. It uses statistical modelling, linking consumer attributes and sensory intensity rating data to product formulation data, helping to optimise products.

In General

It is interesting to note that several users of specialised sensory software that I have spoken to in the past still export their data to stats packages for analysis and/or better quality reporting or graphs. For those less confident with statistics, Guideline+® from CAMO used to offer a guided question and answer option through design and multivariate analysis. It could generate a new test or unravel patterns in existing data, e.g. consumer or sensory research, but has been discontinued.

In conclusion

So what would I personally like to see in a user-friendly sensory evaluation software? An easy interface as Guideline had (Figure 1), with an affordable price tag. Ideally it should have a guided route for inexperienced users, and shortcuts for experts. It should have most common tests, generate questionnaires, offer automatic sturdy and reliable analysis of data, and have easy options to generate reports to executive reporting standard. So which one if any can do all that, or do compromises have to be made? Hopefully future reviews will answer that question.

Anny Dentener runs her own independent Food Tech Consultancy company Adecron Ltd (www.adecron.co.nz) and has no commercial interest in selling software. Contact: anny.dentener@adecron.co.nz