

The ARF has been involved in each of the twelve publicly released XMOS studies, starting with Unilever's Dove Nutrium brand study to the present state-of-the-science XMOS study which measures both sales and branding and integrates the analysis with marketing mix analysis. The XMOS methodology has evolved based on the insights of Marketing Evolution, the ARF and the brands that participated in the research. XMOS is now in its fourth generation. Each generation represents advances to the methodology, analytics and deliverables.

This ARF POV is based on the latest generation methodology.

Recapping the progression:

Generation 1 (branding, limited sampling): Dove Nutrium Bar, Debranded auto.

Generation 2 (branding, representative sampling): McDonald's Flatbread Sandwich, Kleenex Softpack, Colgate Total, AstraZeneca Nexium, Universal Home Video E.T., ING Financial Services, VeriSign

Generation 3 (branding & sales): Ford F-150

Generation 4 (branding & sales, integration with marketing mix): Nestle Coffee-Mate, Kraft Jell-O (and others in progress)

The ARF conducted a thorough review of the XMOS (Cross Media Optimization) methodology and has audited the processes and results of all public XMOS studies. Based on this examination, the ARF holds the following opinions regarding the XMOS methodology:

SAMPLE AND DATA COLLECTION

- The sample used for XMOS is based on representative internet, telephone and/or postal mail depending on client's preference. When XMOS uses an internet sample, the sample is weighted to be balanced on key media and profile variables to produce a representative sample for media analysis.
 - The ARF has worked with Marketing Evolution to compare independent data collection through the representative web sampling and telephone sampling conducted by IPSOS-ASI and found the trends to be nearly identical (Colgate XMOS 2003).
 - The ARF reviewed the data profile and usage consumption patterns of the representative web sampling with MRI quick service restaurants survey profile and found the profiles to be nearly identical (McDonald's XMOS 2003).
 - The ARF continues to work with Marketing Evolution to cross check telephone RDD to representative web sampling.

CONTINUOUS TRACKING

- XMOS uses classic continuous tracking which provides an accurate measurement of the overall impact of the campaign. This continuous tracking is conducted via telephone RDD, web-based "eRDD" or a combination of both.

FACTORIAL EXPERIMENTAL DESIGN

- XMOS uses experimental design to isolate the independent effects of various media. The XMOS application of experimental design is consistent with the highest standards of measurement.
- XMOS uses a *true* experimental design with proper controls thereby avoiding the common problem of comparing exposed versus non-exposed and other common problems associated with "pseudo-experimental" design approaches.

MEDIA NEUTRALITY

- The XMOS methodology does not provide advantage to one media over another.
- XMOS specifically adjusts for possible overstatement of online effectiveness by ensuring that the sampling does not occur immediately after exposure. Instead, XMOS measures the decay of online advertising to align the measurement with the real world ad delivery.

- XMOS specifically avoids the potential for understatement of television and radio advertising effectiveness by analyzing the total impact of TV observed against the overall population rather than using self-reported survey questions to classify TV exposure.
- XMOS accurately measures magazine exposure by using a visual prompt of each individual issue cover (cover recognition) rather than simple title recall.

ANALYSIS

- XMOS has been proven valid for branding impact valuation. XMOS analytics are patterned after the ARF Media Model and include communication and persuasion metrics such as brand awareness, brand attributes and purchase intent.
- The XMOS experimental design methodology successfully isolates the incremental sales influenced by media.
- XMOS provides accurate ROI analysis. The actual cost of each medium is directly integrated into the analysis to generate cost efficiency measures and recommend marketing mix allocations. This dollar for dollar impact comparison across media avoids many of the problems inherent to methods that base recommendations on *reach*, *opportunity to see*, or other metrics definitions which may not be consistent across media.

In sum, the ARF has reviewed the analysis of each XMOS study and opines that XMOS is a valid and valuable solution for marketers seeking to quantify the relative impact of media and optimize their media mix.