Triangulating Nonconscious Measures with Traditional Media Research

Dr. Duane Varan,
CEO

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Background
Lab Philosophy

- Analytical in nature
- Focus on Variables
- Categorizing Observations
- Need to isolate and measure variables

Aristotle

Galileo
New Research Opportunities

**Isolate Variables**
- Behavioral Measurement (particularly with A/B Testing)
- Lab-Based Experiments

**Measure Variables**
- Non-conscious measures of emotion/attention
- Implicit measures of memory/attitudes
- Self-report - but only where meaningful
- Measures dependent on self-report for variables which self-report is unsuited for.

**Continuous Measurement**
- More granular measures of effects in time (i.e. second-by-second)
- Epoch-based measures
- Low measurement half-life (i.e. measured at the time of the effect)
- Post-exposure measures inferring performance or approximating epoch effects
- Measures requiring evaluation/effort during exposure (e.g. dial testing)

**Reliable Measures**
- Data modelling (inferential in nature)
- Machine learning (often suffers from overfit - often atheoretical)

**Less Reliable Measures**
- Measuring dependent on self-report for variables which self-report is unsuited for.
Because our focus is on variables, we’re not looking for the one tool that will best measure ‘media effectiveness’ - we’re building a toolbox so that we always have available to us the best tools for the task.
Media impact works along multiple dimensions which, more often than not, do not run parallel (though the best content often does). So our challenge is to align research to strategic objectives along these dimensions.
Key measures need to be aligned to a brand’s strategic objectives (not merely generic cross-industry measures).

Allows us to evaluate ad impact across multiple dimensions (better accounting for what goes right/wrong).

Allows for brand-specific benchmarking over time.
Neuro Measures - ‘No Common Truth’

Toolbox Approach to Media Research

• Whether we work with one vendor who brings us the full range of measures we need - or with different vendors for each measure, we need a strategy for building our own tool box.

• But the quality of the tool box is only as good as the tools that we use. The standards for good research shouldn’t be compromised for the sake of comprehensive coverage. A bad measure is worse than no measure.
MediaScience Labs (a complete tool box)

Austin Lab

Chicago Lab

Control Rooms

Focus Group / UX Labs

Mock Living Rooms

NeuroQubes®
Case Studies
(showcasing the value of different tools)
US Presidential Debates
The Problems with Dial Data...
Vice-Presidential Debate (2012) - Dial Data

Dial Data

Graphic showing fluctuating data points ranging from -3 to +3.
Vice-Presidential Debate (2012) - Arousal Levels
2nd Presidential Debate EDA (2016) by Affiliation

- Overall
- Undecideds
- Clinton Supporters
- Trump Supporters
2nd Presidential Debate EDA (2016) by Gender
CNN SECOND PRESIDENTIAL DEBATE

Hillary Supporters

Trump Supporters

Undecided
Five Insights Growing Out of MediaScience’s 2016 Research

1. Voters of all persuasion had become largely desensitized to Trump prior to the Access Hollywood video.

2. The Access Hollywood video issue resonated much more with women than with men.

3. Surprisingly, Hillary supporters exhibited negative emotions when she spoke during the Commander in Chief forum (reflecting the enthusiasm gap).

4. Undecided voters were highly engaged (unusually so) throughout the debates.

5. Undecided voters were far more responsive to the discussion of the issues than were candidate supporters.
Ad Impact
(Mars Case Study)
Mars Sales Validation Study

130 Mars Inc. ads
Sales effectiveness known via single source data

- Collaborative study between Mars, the Ehrenberg-Bass Institute and MediaScience
- Pairs sales impact (single source measured) with both traditional and neuro measures.
- To appear in upcoming issue of Journal of Advertising Research
Neuro measures help better identify sales impact

Correctly Identifying In-Market Success (Score = 3 or 4)

Traditional: 58% Incorrect, 42% Correct
Biometrics: 78% Correct

Significantly better than chance
Comparing ‘easy’ vs. ‘hard’ decisions

Correctly Predicted In-Market Success (1 vs 4 / 2 vs 3)

- AVI = 1 vs. 4 (Easy) with 88% using Traditional Measures
- AVI = 2 vs. 3 (Hard) with 76% using Traditional Measures

79% using Traditional Measures
60% using Traditional Measures

Dashed line = chance

Incorrect
Correct
Biometrics help clarify when strategy works

Correctly Identifying In-Market Success (Score = 3 or 4)

- Humor Strategy Attempted but **NOT** Achieved: 54%
- Humor Strategy Attempted **AND** Achieved: 84%

Dashed line = chance
- **Incorrect**
- **Correct**
Different strategies need different tools

Correctly Predicted In-Market Success (Score = 3 or 4)

Heart Rate Smile AT

Heart Rate EDA Smile TtP

85%

Continuous Humor Strategy Attempted and Achieved

Set-Up/Pay Off Humor Strategy Attempted and Achieved

Dashed line = chance

Incorrect

Correct
Brand Integration Impact
Brand Integrations: Using traditional measures

Purchase Intent (self-report)

41.6
54.8
Biometrics help explain ‘why’ brand integrations work!

**Viewer Arousal Levels**
(during test ad exposure)

1st Exposure
2nd Exposure
3rd Exposure

- **without Integration**
- **with Integration**
Cardiac Deceleration During 3rd Ad

Heart Rate
(during first 4 seconds of third ad exposure)
Visual Attention
(ESPN Viewability Study)
Ad Gaze → **Strong at .5 second**

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% Participants With Eye Movement Intersecting The Ad

*Binary Gaze (0 and 1): Whether participant’s eye movement intersected the ad or not.*
Static → More Fixation on mobile and PC
Mobile Scrolling → Earlier Fixation

- **PC Static**
  - 500 ms: 3%
  - 1,000 ms: 9%
  - 2,000 ms: 31%
  - 4,000 ms: 68%

- **Mobile Static**
  - 500 ms: 9%
  - 1,000 ms: 41%
  - 2,000 ms: 56%
  - 4,000 ms: 66%

- **PC Scroll**
  - 500 ms: 0%
  - 1,000 ms: 14%
  - 2,000 ms: 5%
  - 4,000 ms: 33%

- **Mobile Scroll**
  - 500 ms: 46%
  - 1,000 ms: 48%
  - 2,000 ms: 56%
  - 4,000 ms: 33%

% Participants With Eye Fixation on the Ad of 100 milliseconds or more

*Visual attention = ad fixation at 100 milliseconds or more; ms = milliseconds
Eye fixation is where the eye rests on the ad for 100 milliseconds or more*
Although **traditional measures** are still valuable (particularly when people can accurately report on an effect), the **new neuro/biometric measures** provide exciting **new tools** for better measuring key variables (particularly related to **attention**, **emotion** and **implicit** attitudes/memory) on a **continuous** basis.
varan@MediaScienceLabs.com