Neuromarketing And The Science of Influence

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- Feb 19, 2015
  - How Neuromarketing And The Science of Influence Will Change Marketing

- Mar 04, 2015
  - How The Integration Of Technology And Neuroscience Will Boost Marketing Tech Growth

- May 07, 2015
  - The Silent Killer Of Corporate Profits: Ad Waste
How Neuromarketing And The Science of Influence Will Change Marketing

Recent reports from Google expose the current state of internet advertising—56% of digital ads are not seen by humans, and only 50% of ads are viewable. Other reports have detailed bot fraud and URL masking, which no one anticipated ten years ago. Today’s 56% of digital ads not being seen isn’t any better than the 1880’s ad market when John Wanamaker lamented that 50% of every dollar spent on advertising is wasted.

New digital advertising platforms and programmatic software have done little to address the issue of ad waste, also known as ROI—or lack thereof. However, new research on Neuromarketing just published in Frontiers in Human Neuroscience may lead to a whole new way of understanding and influencing consumer behaviors through the science of influence as a promotion variable. The breakthrough research was conducted by the Applied Neuromarketing Consortium, a group of interdisciplinary professors from Northwestern’s Medill and Kellogg Schools along with the Feinberg School of Medicine, in addition to doctors from Massachusetts General, Aston Business School UK and Drexel University.

Neuromarketing and brain scans have come of age and the new findings now offer scientific evidence about an integrated science of influence, which marketers can use to develop new marketing models that utilize influence based on how stimuli of the human mind relate to perception, memory and decision making. There is now considerable justification to use influence as a marketing, media and promotion variable. In other words—how the science of influence can replace old communication theory and get beyond a focus on what you did to how the market and consumers respond.

“There is now considerable justification to use influence as a marketing, media and promotion variable.”

I recently asked one of the authors of the study, Dr. Martin Block of the Medill School, how this new and ongoing work may impact marketers struggling to make sense of today’s new marketplace. Here are some of his comments:

Gary Drenik: How can Neuromarketing and the science of influence be used by marketers?

Dr. Martin Block: Marketing management has been plagued with two problems: having data that can relate controllable marketing (especially communication related) variables to real outcome variables (sales or other returns) and finding marketing variables that are consistent across variable options. For decades there was talk of single source data which would make it easy to relate variables to outcomes, but it never happened. The current availability of real consumer transaction data may have derailed the single source idea. Fusing transaction data, along with social data and syndicated data is being substituted for single source.
How Neuromarketing And The Science of Influence Will Change Marketing

Continued from page 1

However, the various syndicated data have many different measures, different consumption or usage measures, and in some cases almost nothing beyond overall spending as is typically found in store activity. However, influence is a consistent measure across all marketing inputs and over the years Prosper Insights & Analytics has attempted to provide a consistent measure across the marketing inputs by way of its media influence to purchase data.

Drenik: What is the most important “take-away” from the research for a marketer?

Block: Influence allows a marketer to directly compare seemingly different categories, such as TV, coupons and shopper loyalty cards. The influence measure has to be accepted on face validity. The recent work in Neuroscience, along with a systematic definition of Neuromarketing, has led to the creation of the integrated science of influence. Influence of external stimuli on the human mind is now being systematically studied and related to other concepts such as perception, memory and decision making. There is now considerable justification to use influence as a marketing media and promotional variable.

Influence has utility as a marketing variable beyond the simple straight forward survey question.

Drenik: Thank you Martin.

In addition, the current issue (February 2015) of the American Marketing Association’s “Marketing News” features an article written by Dr. Don Schultz, professor (emeritus-in-service) of integrated marketing communications at Northwestern. In this article, Schultz highlights key areas which can create problems for marketers who focus more on distribution of messages than outcomes. He cautions that message distribution is not an endpoint for marketers, but what counts is the Influence they have on consumers and that organizational success is not so much what you did as how the market and consumers responded.

“...message distribution is not an endpoint for marketers, but what counts is the Influence they have on consumers...”

Marketers who would like to see how influence can be utilized to better improve their marketing performance as well as other predictive analytics on consumers, click here.

Disclosure: Prosper grants data access on consumer behavior and media influence to over 14 of the U.S.’s leading universities, including The Medill School of Integrated Marketing at Northwestern.

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How The Integration Of Technology And Neuroscience Will Boost Marketing Tech Growth

The fusion of science and technology is fostering a new era of growth for the marketing category. The need for data-driven communication solutions brought about by the growth of the Internet has fueled this growth. The old network message distribution model is about to crumble due to impact of changes in technology and its adoption by consumers. Marketers are being forced to seek new models such as those based on Neurromarketing which focus on individuals and how the various choices they are faced with can be shifted or influenced at multiple “scales” of behavior (e.g. individuals, group or market/society). Much of this will happen as part of the science of influence.

Achieving a level of accountability and improving marketing ROI was the hope of the digital/online world. However, in their haste to go digital many marketers simply took a century old marketing model that assumed a rational process of persuasion, which follows a sequence from awareness through purchase that consumers could consciously articulate, and wedded it with programmatic ad distribution platforms. Other marketers who have recognized that digital technology has changed how people are influenced by media sought to integrate ideas about non rational and rational processes such as those published by Kahneman on ideas related to neuroscience versus individual decision making.

For marketers who have gone down the old persuasion model path, success has been like finding the proverbial unicorn. Despite the fact that marketers are pouring money into digital, the 2014 4th Quarter Agency Forecast Survey by Strata Marketing found that 50% of ad agencies are not sure they are getting good ROI from online, and the majority of agencies say video ads don’t always reach the intended target. Further research just released by Google in December of 2014 shows an almost unbelievable 56% of ads on the Internet are not seen by humans.

Perhaps the abysmal click through rate on Internet display ads of .1-.3% and 4.25% for video ads is partially due to the bot fraud and URL masking that composes the non-humans in Google’s Research. While the bots may help the ad distribution look good, bots don’t buy products—people do. Clearly the old rational persuasion network distribution model no longer works as it may have in the past and by simply transferring it to the new digital world marketers have missed the target—the customer who has moved.

To counteract this dilemma many marketers are looking to data-driven marketing for relief. In fact, Foundation Capital issued a new report in February of 2015 calling for marketing tech expenditures to grow ten times to $120 billion by 2025. Neuromarketing and the science of influence will play a key role in these new technology/data driven marketing models as everything from allocation to placement will be revamped to increase ROI, based upon how external stimuli/media influence the human mind in decision making.
How Neuromarketing And The Science of Influence Will Change Marketing

Continued from page 1

One of the more exciting findings of research in this new Neuromarketing world was published in the recent *Frontiers of Neuroscience*. The research redefines Neuromarketing as the Integrated Science of Influence. The work behind the research is ongoing and is being conducted by The Applied Neuromarketing Consortium at Medill, Kellogg and Feinberg School at *Northwestern University*. The researchers are systematically studying the influence of external stimuli on the human mind and relating them to other concepts such as perception, memory and decision making. For marketers, “There is now considerable justification to use influence as a marketing, media and promotion variable,” said Dr. Martin Block, one of the papers co-authors.

The integration of science and technology to redefine Neuromarketing as the Science of Influence is a great example of how marketing tech will create new data driven opportunities to replace old communication theories and drive ROI in the digital world.

To see an example of how media allocation based upon consumer acknowledged influence to purchase could be used, [click here](#).

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The Silent Killer Of Corporate Profits: Ad Waste

All of the items below are from recent headlines or research reports and they depict the turmoil and turbulence in today’s advertising world caused when advertisers attempt to deal with a new technology-driven media environment.

- **Item:** 56% of digital ads are not seen, according to Google/Double Click study ([More Than 56% Of Ad Impressions Are Not Seen, Google Says](https://www.google.com)) and display ads purchased through programmatic channels were 55% more likely to be loaded by bots than non-programmatic ads ([5 Things Marketers Should Know About Bots and Ad Fraud](https://www.marketerswerkstatt.org)).

- **Item:** Television audience ratings have declined 50% since 2002, according to Morgan Stanley analysis. ([BRUTAL: 50% Decline In TV Viewership Shows Why Your Cable Bill Is So High](https://www.forbes.com)).

- **Item:** Former Mediacom CEO Alleges Widespread U.S. Agency ‘Kickbacks’

- **Item:** In 2015, $6.3 billion of digital ads will be based on fraudulent activity ([ Nearly 25% of Video Ad Views Are Fraudulent, and 6 Other Alarming Stats](https://www.adsweek.com)), while ([50 Percent Of Ad Agencies are Not Sure They’re Getting Good ROI From Online Video Ads](https://www.4a.org)).

- **Item:** For those who plan on buying a car or truck, 27% say TV influences their auto purchases. However, leading U.S. automakers spent nearly $6.5 billion (76% of measured media) on TV ads in 2013.

Apparently marketers aren’t winning this new war as the headlines indicate. Each year, hundreds of millions, maybe even billions, of ad dollars may be wasted due to outdated communication models.

In an old Seinfeld episode, George Costanza tells Jerry that every decision he has ever made in his life is wrong. He surmises the remedy would be to do the opposite of what he has always done. He begins by ordering a chicken salad sandwich instead of a tuna salad sandwich. Voila! It works! An attractive lady at the counter takes note and George gets a date instead of the usual strike out. Like George, it’s time for advertisers to recognize the decisions that they are making based upon the old communication model are many times wrong and potentially wasting millions of ad dollars. Perhaps it’s time to try something different, something that may even be the opposite of what they are doing.

Old ad models were based on theories developed before scientists could utilize fMRI technology to better understand and observe how the brain works and how messages are processed. They assumed people could be trained to purchase similar to the way Pavlov trained dogs via stimulus (awareness from ad messages and response—purchasing). Therefore the number of times a person saw a message the more quickly they would respond. More messages theoretically equaled more response.
The Silent Killer Of Corporate Profits: Ad Waste

Continued from page 1

In the 2009 book *Media Generations*, Drs. Don Schultz and Martin Block of the Medill School at Northwestern pointed out that this theory worked to the advantage of media. It is easy to see why ad budgets exploded in the 70’s, 80’s and 90’s. They also point out that the old media message distribution model is no longer viable and clearly outdated. They make the case for a consumer-centric model for media to improve ROI.

To demonstrate the new consumer-centric model of media influence, Schultz and Block posited that for any consumer target, the influence to purchase by various media forms is much more important than whether somebody simply liked a media form or not.

To prove their point they analyzed the target market of people who plan on buying a car or truck. They determined the influence to purchase a car for various media forms for the target market based on what consumers said. Lastly they estimated the influence per dollar for each media category and weighted each category by relative usage. The result demonstrated the disconnect between what leading automakers were spending on various media forms versus the media potential car buyers said influences their decision to buy. Using the latest data from Prosper’s MediaPlanIQ, the result is the same with automakers overspending on TV.

![Optimal Measured Media Dollar Allocation for Car and Truck Purchase Planners (Jan-15)](image)

Source: Prosper MediaPlanIQ™, Jan-15
The Silent Killer Of Corporate Profits: Ad Waste

Continued from page 2

The following chart shows the new optimal allocation of media by influence compared to actual spending. Over investment or under investment is apparent in the last column which shows “how much” over or under:

<table>
<thead>
<tr>
<th></th>
<th>2013$</th>
<th>Pct</th>
<th>Optimal$</th>
<th>Pct</th>
<th>Change$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Internet</strong></td>
<td>722.2</td>
<td>8.5</td>
<td>1398.8</td>
<td>16.5</td>
<td>676.6</td>
</tr>
<tr>
<td><strong>Radio</strong></td>
<td>215.5</td>
<td>2.5</td>
<td>2268.3</td>
<td>26.8</td>
<td>2052.8</td>
</tr>
<tr>
<td><strong>TV</strong></td>
<td>6,480.0</td>
<td>76.4</td>
<td>1659.8</td>
<td>19.6</td>
<td>-4808.2</td>
</tr>
<tr>
<td><strong>Magazines</strong></td>
<td>769.6</td>
<td>9.1</td>
<td>1208.7</td>
<td>14.3</td>
<td>439.1</td>
</tr>
<tr>
<td><strong>Newspaper</strong></td>
<td>217.5</td>
<td>2.6</td>
<td>599.1</td>
<td>7.1</td>
<td>381.6</td>
</tr>
<tr>
<td><strong>Outdoor</strong></td>
<td>74.0</td>
<td>0.9</td>
<td>1332.1</td>
<td>15.7</td>
<td>1258.1</td>
</tr>
</tbody>
</table>

Source: Prosper Insights & Analytics analysis of Ad Age 100 LEADING NATIONAL ADVERTISERS & Media Planet
*Top 10 auto advertisers from Top 100 List

It’s the “how much” that shows the levels of hypothetical ad waste that is built into old models based upon a theory for a different time and world.

More recently the Applied Neuromarketing Group at Northwestern has taken consumer-centric modeling to new heights. Under the direction of Dr. Hans C. Breiter of the Feinberg School, the group is busy developing revolutionary neuromarketing concepts built upon the fMRI work Breiter began conducting while he was at Massachusetts General Hospital.

The work of this group goes beyond theory and brings in the new perspective of the unconscious mind, which they now have the fMRI technology required to measure. Their latest work titled “Redefining Neuromarketing as the Science of Integrated Influence” was just published in the February 2015 Frontiers in Neuroscience journal.

Breiter says persuasion occurs in the rational mind; however, many behaviors originate in the subconscious mind and understanding how influence works on the subconscious mind is key for changing behaviors. The group can map internal preferences (likes or dislikes) of the brain between individuals or groups in order to influence behavior change. Now that’s about as opposite of the old message distribution model as possible—mapping unconscious likes and dislikes of individuals versus sending out messages to Pavlov’s dogs/consumers. And as Breiter points out, “The brain does not lie: it does what it does.”
The Silent Killer Of Corporate Profits: Ad Waste

Continued from page 3

Maybe the opposite is what needs to be considered when it comes to corporate ad budgets. New scientific work in the area of Neuromarketing and the Science of Integrated Influence is helping to begin the discussion for how to eliminate ad waste and improve ad productivity.

The failure to address the ad waste issue by large companies could have serious negative consequences for profitability performance. Eliminating ad waste may be a lot better in the long run than shuttering a lot of stores, thousands of workers being laid off, closing a division, etc. Additionally, if management doesn’t address the issue, activist investors may recognize the problem as a long-term solution for increasing corporate profits.

The current hyper-competitive, slow growing market makes this the perfect time for leading marketers to step forward and take on the challenge of identifying and eliminating potential ad waste, the silent killer of corporate profits. Now who will lead and step forward first?

Gary Drenik is CEO of Prosper Insights & Analytics, a company that prides itself on turning data into evidence-based solutions for the C-Suite. www.ProsperDiscovery.com

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