



THE PROMISES AND PITFALLS OF SMR

Prevailing discussions and the naked truth

By Annie Pettit

Marketing research is an ever-changing space, continually pushed forward by the evolution of research methodologies. Each new discovery, ripe with promise and awash with perils, brings something never before possible to the table. Now, social media research is taking its turn to delight innovators and exasperate laggards.

The online world has been host to many arguments about the validity, reliability and actionability of social media research, regardless of whether the format taken is small- or large-scale, qualitative or quantitative, or overt or covert. As with any new method, the very nature of our business demands that we research each of these issues prior to fully embracing the method. Our focus here is on social media research as the analysis of data gathered through passive online listening techniques.

PUBLIC PROMISES

Small sample size means less than 10,000. For those still trying to understand social media research, a quick online search will return a number of key promises. It will drastically reduce our reliance on survey volunteers, a group of people who may not even be a representative group of people to begin with. It will allow researchers to listen to people who may have never contributed to research before via surveys, focus groups or other traditional research methods. It will allow for the collection of opinions from people and countries where mobile technology has outpaced or even skipped desktop and laptop technology. All of these promises, plus the fact that about 59 percent of American adults who use the Internet use social media websites (according to June 2011 Pew Research Center data), have led to an astounding number of new people and fresh opinions to contribute to research. Where researchers once had to struggle to generate sample sizes of 100 or 300, sample sizes now can be easily in the thousands.

Listen vs. ask. Another key promise relates to the way in which opinions are gathered. As opposed to an asking process in which researchers must work hard to elicit responses from consumers, social media research uses a listening process where consumers voluntarily and eagerly push their spontaneous responses outward to friends, listeners, brands and researchers. Instead of relying on researchers to create focused questionnaires and discussion guides for consumers to react to in specified ways, this new methodology allows people to share their brand opinions about any topic or brand they wish, regardless of whether a researcher has pre-identified the topic and whether a researcher or brand has even requested their opinions. This freedom of speech is also conducive to the gathering of opinions from people who may have never participated in research before.

Freedom of location. In addition, consumers can choose the time and space where it makes the most sense for them to share their opinions with their friends, family and

followers. Not only can consumers choose the physical location, such as their home, their school or their commute on public transportation, they can also choose their preferred Internet location and style. Those who prefer to share detailed opinions can do so in personal blogs (e.g., Wordpress, Facebook Notes). Those who prefer quick, short on-point messages can share their opinions as status updates in social networks (e.g., Twitter, Facebook), while enjoying humorous clips on a video site (e.g., YouTube) or on any other website that allows viewers to express themselves publicly.

PROMINENT PERILS

Lack of validation research. As with any new methodology, the initial buzz brings with it two groups of people: those who are excited to use it for everything and those who are resistant to use it at all. Resisters often tout the lack of validation research, a process through which all new methods must navigate. But testing new methods is a risky and expensive venture. Clients aren't always willing to foot the bill to test their own brands on research that may subsequently be labeled invalid and when they do decide to test, they may not be open to sharing proprietary results. So far, studies have demonstrated that Twitter data may be used to predict the stock market or movie box office revenues, per MIT's Technology Review. Over time, however, as more companies decide to share their results externally, the research-on-research library will grow and the industry will have a far better understanding of how and when social media research produces the most valid results. As of today, there is insufficient public scientific data to support (or not support) the validity of social media research.

Fear-based resistance. Some of the resistance to social media research may lie in the misperception that it will replace surveys, focus groups and other common methodologies. This fear, however, is unfounded. There is no denying that a portion of the survey business will be usurped. However, there will always be research objectives that simply cannot be met via any method but surveys or focus groups. Further, regardless of how many surveys that social media research does end up replacing, it cannot negate the essential requirements of the research process. Social media research cannot succeed without researchers who are trained in the art and science of sampling, weighting, scaling, norms, research design, data analysis and data presentation. Though the source of the data may be different, the treatment of the data must be handled by skilled researchers. If we do not overcome this fear, our industry may get left behind.

Researchers came second. To state the obvious, social media is not an outgrowth of the market research industry. Similarly, Web analytics were developed not from the research industry, but from the IT industry's need to build

Executive Summary

Social media research holds a great deal of promise for those who can tap into its tremendous potential. As this article points out, it is likely to succeed in areas such as tracking research, campaign research, usage and attitude research, and segmentation research. Like any new methodology, however, SMR it has its share of perils and disappointments. Despite some unresolved issues with data reliability and quality, the science of SMR seems destined to prevail.

AS MORE COMPANIES DECIDE TO SHARE THEIR RESULTS EXTERNALLY, THE RESEARCH-ON-RESEARCH LIBRARY WILL GROW AND THE INDUSTRY WILL HAVE A FAR BETTER UNDERSTANDING OF HOW AND WHEN SOCIAL MEDIA RESEARCH PRODUCES THE MOST VALID RESULTS.

more useful websites. As those skilled in Web analytics learned more about social media, they began to contribute to the success of business in more ways than choosing titles, colors and website layouts. IT professionals and business analysts began to work together to conduct work that would historically be deemed within the expertise of market researchers. This cooperation progressed to the point where they are now analyzing social media data to evaluate and track brand performance.

In the meantime, along with many other industries, the market research industry suffered over the last couple of years due to the recession. If researchers succumb to fear and fail to innovate quickly, our industry will continue to suffer. But it won't be a result of the economy. It will be the result of research tasks leaving the market research industry.

This trend need not continue, though. Market researchers have unique skills and a long history of shared experience in specialized knowledge areas. These essential skills allow us to turn random collections of data into valid and reliable data. Research organizations that focus on applying these essential skills to new data sources will find that this is a less serious problem.

DIY data quality. In this instance, DIY does not refer to the traditional argument the research community has about skilled researchers vs. unskilled workers (though many DIY workers are, in fact, skilled researchers). This peril refers to the fact that DIY social media research does not currently benefit from the same level of large-scale applicability and data quality that formal SMR systems have. The amount of work required to clean, score, code and process thousands and millions of social media data pieces into quantitatively and qualitatively accurate data sets in just hours or days is beyond the capabilities of DIY systems.

For instance, Apple Computers can benefit greatly from SMR, but if the hundreds of other ways in which the word apple is used (e.g., pie, cookies, juice, cider, crumble, cake, strudel, snacks, fruit leather, shampoo, conditioner, hand sanitizer) are allowed to enter the data set, the results will be contaminated and misleading. Most DIY systems cannot apply adequate data quality systems, which means users end up being disappointed with the quality of their results, dismayed by social media research in general and apprehensive

about future innovations in market research. This type of DIY research is the bane of all market research.

Sentiment. Sentiment is a signature component of social media research and has taken the brunt of abuse. Critics have slammed the validity of automated sentiment systems, claiming they are rarely better than chance (given that most verbatims are scored neutral as opposed to positive or negative). However, there is no standard sentiment system. Even off-the-shelf systems must be fine-tuned and manually taught to properly score unique styles of data. As such, tests of a few systems cannot be generalized to other systems. Of course, finding a valid system is not a quick or simple task.

In order to challenge the critics, every system being considered must go through a scientific process of validation, but the scientific process for validating sentiment is not well-understood. Those unfamiliar with qualitative research and inter-rater reliability methods are also unfamiliar with the requirements of large sample sizes and blind rating. As such, a sentiment system has not been validated until thousands of records, across various categories and from various data sources, have been scored by independent raters. Methods that stray from this process only serve to contribute to the abundance of misinformation about what a good validity score is. Given that human inter-rater reliability is at best around 85 percent, this must be our comparison measure of quality as opposed to 100-percent reliability.

With the basic misconceptions covered, we must acknowledge that the validity of sentiment and text analysis is not where social media researchers want them to be. Those few who achieve good scores of 60 percent or 70 percent want nearly impossible scores of 80 percent or 90 percent. Social media researchers also want better ways of parsing data such that different sentiment scores can be assigned to different pieces of text. For instance, the ideal sentiment system would assign several different scores to, "The pickles on my hamburger were nice and crunchy, but the tomato was soggy." First, the statement overall should receive a negative score. Second, the pickles should receive a positive score. And third, the tomato should receive a negative score. This may seem to be a simple task, but splitting apart sentences into their various components, individually scoring the sentiment of each piece and then using the right

sentiment score for the right analysis is very difficult.

The final conclusion with automated sentiment analysis is this: No, it is not perfect. No, it is not more valid than human scoring, nor will it ever be. But automated systems that have been validated to meet minimum standards of validity are irreplaceable for scoring millions of data points with perfect reliability in record time.

In addition, mastering social media research requires tackling the following specific research objectives.

TRACKING RESEARCH

Delight in instant historical data. One of the greatest promises for social media research lies within tracking research that monitors brand sentiment over discrete units of time. Because social media data is tagged with times and dates, and because it is stored publicly online until such time as the creator deletes it, historical data can be instantly available. Of course, just because data is available does not mean it is valid or comparable, but brands that do have historical data can decide whether its use is appropriate. Transitions between research methods once required months of forward-looking research. With social media research, however, the only task that takes any time is the actual analysis of the matched data. Transitioning tracking research will now be far quicker.

TYPE OF RESEARCH	PROMISE	PERIL
Campaign	Instant data will shorten response times	Awareness cannot be measured Non-consumer brands cannot participate
U & A	Massive quantities of extra variables will encourage serendipitous findings	Lack of key segments
Segmentation	Demographic solutions are being built	Lack of demographic data

We know how to transition. Having already experienced the transition from paper and phone surveys to online surveys, we've learned exactly how to move studies between methods. We are careful to monitor the effects of wording changes. We are careful to monitor how many variables shift, which variables shift and by how much they shift across overlapping months or quarters of data. Though the differences between traditional methodologies and social media research are far greater than slight wording revisions, we retain our experience with the process and can better respond to client's requests to move their tracking research to a social media option.

The data is different. Whether you love it or hate it, there is a peculiar trend with tracking studies: nothing ever

changes. Once the survey has been designed, the sampling strategy put into place and the survey panel selected, the results are fairly consistent over time (assuming appropriate sample sizes have been selected). Very few data points change and what changes do occur are often very small. But social media data is very different. The ability to listen to larger volumes of people from wider demographic and psychographic groups means that data can be quite volatile. Researchers must expect to see many large changes in their data every wave. This can be somewhat allayed by using relatively large sample sizes (e.g., >100,000) but researchers and research buyers will have to learn a new normal for tracking research.

CAMPAIGN RESEARCH

Awareness cannot be measured. Just as surveys cannot meet every research objective, social media research also cannot meet every objective. Campaign research that strives to measure awareness of various advertising/marketing campaigns is perfect for survey research with random samples of targeted consumers. A lack of awareness clearly indicates an ill-performing campaign. However, within social media, the absence of data about a brand or campaign does not, by design, signify the absence of awareness. It may signify a lack of interest, a lack of online presence (compared with offline presence) or an actual lack of awareness. Where awareness must be measured, social media research cannot serve that need.

Brands aren't always relevant. Social media is the current place to be. Every brand is encouraged to build an online presence, to engage with consumers, to have Facebook, Twitter and YouTube accounts. But brands like Coca-Cola and Skittles are succeeding where other large brands are failing. Failures often can be traced back to brands that have small fan bases that can't generate the quantity of data required to take full advantage of social media research. Conversely, some massively large brands fail because there is an insufficient fan base for non-consumer products. Consider this: Have you "friended" the world's largest stock holding company, power company or raw materials company? Though the business owners hold their products and services dear, social media research related to their specific brand will not be a success until they become personally relevant to their consumers.

Watch live data. Of course, social media holds an exciting promise for campaigns that are relevant to consumers. The instantaneous nature of the Internet means that any campaign can be tracked on a live basis. Researchers will no longer have to worry about building surveys and receiving sufficient numbers of completes within a week. Social media research means that those completes have been scored and coded and are now waiting for you, minute by minute, since the moment your campaign hit YouTube and mailboxes.



USAGE AND ATTITUDE RESEARCH

Missing target groups. A good usage and attitude study depends on a research method that gathers data from a wide selection of people. We must listen to product users who love or hate a product and we must listen to product non-users who love, hate or don't even know about a product. Survey and focus group methods are perfect for ensuring that all of these types of people have been accounted for.

As we've just noted, social media research can only work when there is sufficient data available for measurement. Since social media data cannot reflect the opinions of people who are unaware of a product nor people who simply choose not to discuss a brand, we risk not learning about the differences among the various segments. Social media research cannot tell us why our target users have not heard of our brand or why they choose not to discuss a brand in social media. As a result, identifying the key differentiating

the flavor, smell and feel of the same item. Across hundreds of thousands of conversations, thousands of highly relevant brand- and category-specific topics may be generated and available for measurement. And when a thousand variables are available for analysis, the chances of serendipitous findings are quite high.

SEGMENTATION RESEARCH

Missing demographics. Segmentation research is one of the mainstays of marketing research. Rather than selling products and services to large generic groups of people who may not be interested, segmentation research allows businesses to design their products for the specific group of people who are interested in them. Historically, this research thrived under the fact that individual information was available across 10 or more demographic variables.

Unfortunately, the lack of demographic information is a serious peril. Some websites provide space for their users to share a few demographic details, but this information is sparingly filled in and often not available due to privacy policies. The end result is that a tiny percentage of data points have limited demographic information and the data cannot generalize beyond individuals. As researchers, we know the lack of

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factors that will ultimately lead to better distribution, better marketing and better product development will suffer.

Serendipitous 10-hour surveys. Fortunately, social media research offers an astounding promise in this area. Most traditional research methods are resigned to using research methods that must respect the clock. Surveys must not be longer than 20 minutes. Personal interviews must not be longer than 30 minutes. Focus groups must not be longer than one hour. Even though the quantity of information we require could fill a 10-hour survey, we must distill our research needs into a much smaller box.

However, social media research operates on a very different foundation. Methods that focus on crawling the Internet for pre-existing data have virtually no limits on how many pieces of data can be gathered. When a large sample of data is gathered—and in the social media space, a large sample means hundreds of thousands of records, not 500 records—it is possible to work with data that could ultimately compare to a survey that is 10 hours or longer. For example, a thousand people may wish to share their opinions about the size, shape and color of something, while another thousand people may share opinions about

sufficient demographic data can skew research conclusions. This problem must be solved quickly.

Emerging demographics. If we must solve the demographics problem quickly, let's start now. A number of websites are currently available, such as PeekYou and Spokeo, which collate information about individuals from a variety of websites. For example, assuming all privacy regulations and permissions have been respected, and that the collator has actually matched the right person across the websites, demographic collators may gather age and gender from Facebook, geography from Twitter, education from LinkedIn and the age of your children from your personal website. Once matched with the comments made about brands from the accounts, a specific demographic profile can be incorporated into the research process. The validity of these systems is still insufficient, but the systems exist and they will eventually succeed.

AN EMERGING PERIL

Ethics. Social media research cannot be discussed without a serious call-out to ethics. But let's move beyond the

standard fare of discussing whether people do or don't want their information gathered and analyzed by market researchers. Let's think about where social media research is headed in terms of being conducted outside the market research world and the development of individual level demographics and geographics.

Where is the ethics line? Is it ethical to collate personal data from across the Internet? Or rather, is it intelligently efficient or strangely creepy? What happens when market research tasks are conducted outside the realm of market research industry ethical guidelines? What happens when people who have never been educated in qualitative research, in observational research methods or in human ethics start to work with sensitive data involving personal



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feelings as opposed to financial records? Even within the market research community, these questions remain unresolved.

Social media research is still new and under development. Misinformation and exaggerated claims abound, spurred on by those wishing to take advantage of a method that holds enormous promise.

As researchers, we must each use our skills to scientifically evaluate the systems we use. In the end, science will prevail. **MR**

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