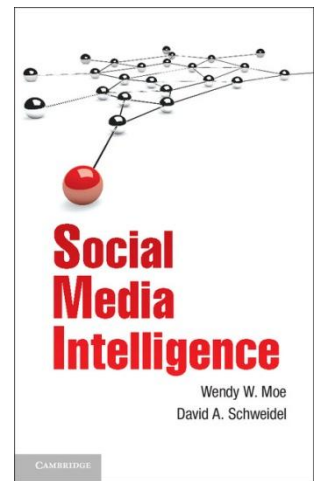


# Excerpts from Social Media Intelligence

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## Introduction

In the world of Facebook, Twitter and Yelp, water-cooler conversations with co-workers and backyard small talk with neighbors have moved from the physical world to the digital arena. Previous exchanges with familiar and trusted individuals have been replaced by large scale chatter accessible to acquaintances and strangers. Discussions that once went unrecorded now leave traces that can be explored years later. The way in which we share information and opinions has changed irrevocably.

In this new landscape, organizations ranging from Fortune 500 companies to government agencies to political campaigns continuously monitor online opinions in an effort to guide their actions. Are consumers satisfied with our product? How are our policies being perceived? Do voters agree with our platform? Brand managers, marketers and campaign managers can potentially find answers to these questions by monitoring the opinions shared through social media.

But measuring online opinion is more complex than just reading a few posted reviews. In this book, we move beyond the current practice of social media monitoring and introduce the concept of social media intelligence. While social media monitoring is an essential step in developing a social media intelligence platform, it is by nature descriptive and retrospective. That is, social media monitoring describes what has already happened. It does not prescribe or guide an organization's next steps.

Social media intelligence, on the other hand, links social media data and metrics to strategic decisions and performance. To transition from social media monitoring to social media intelligence, we must:

- (1) understand the behaviors driving the creation of online opinions from both a psychological and sociological perspective,
- (2) assess the implications of these behaviors on how we interpret social media, and
- (3) integrate these insights into an overall strategy.

The first step is to understand the behaviors that contribute to someone's decision to post online. What motivates their desire to share an opinion? It may be that their intent is purely altruistic or they are fueled by the need to improve their standing in the eyes of others or perhaps a combination of both of these factors. These underlying motives may affect the

content they share online, from the language that they use to the platforms through which they choose to participate. In addition to these intrinsic forces, there may also be external factors that influence such decisions, including the opinions of others. In Part I of this book, we will discuss a number of psychological and sociological factors that influence how individuals express themselves on social media.

Having explored the drivers of online opinion behavior, we next take a step back and look at how this shapes population trends. In Part II of this book, we examine how the dynamics influencing behavior at the individual level result in predictable conversational trends at the population level. These trends in turn impact subsequent opinion behavior. We explore how opinions systematically drift, becoming more negative and more radical. We also discuss the fragmentation of the population as individuals gravitate to communities of like-minded individuals and avoid those with dissenting opinions.

Armed with this knowledge, Part III then presents a four-part framework for social media intelligence:

1. Managing your own community to gather better intelligence
2. Cutting through the online chatter to extract insights from other venues
3. Integrating insights from social media with other information sources
4. Building social media intelligence into your organization's strategies

Social media is replete with its share of noise and chatter that can contaminate social media monitoring efforts. But with an understanding of the factors that shape online opinions, we can move beyond simply monitoring social media conversations to identifying key insights, insights that can help steer our organization's strategic decisions.

## The Science of Opinions

Before we jump into how organizations can develop their social media intelligence capabilities, we first need to understand the science of opinions. Behind every social media comment posted is a person with an opinion. However, not everyone with an opinion chooses to share that opinion online. The opinions we see posted to social media are an outcome of a two-stage process. In the first stage, we form our opinions (opinion formation). Then, in the second stage, we share our opinions with others (opinion expression). However, we don't share all of our opinions. Instead, the opinions that we ultimately post online are those that somehow merit sharing. In other words, the opinion expression stage can be thought of as an opinion filter that allows some of our opinions to pass through to be posted on social media while our other opinions remain unshared.

While opinions are subjective by nature, we'd like to think that our views are based on well-thought out evaluations of an issue, experience or product. But whether we are considering our most recent dining experience at a restaurant or where we stand on political debates, our opinions are also influenced by a host of other factors such as advertising, pre-conceived expectations, and social influence. When we read opinions that others have posted online, we shouldn't be asking how this person is evaluating their experience. Instead, we should be asking: *What is influencing their evaluation of the experience?*



## How Does Social Context Affect Opinion Expression?

In some situations, we might express more agreeable opinions to fit in and conform to the social norms. This might involve tempering our true beliefs and expressing an opinion that we expect would be seen as less extreme if we suspect that our point of view differs from those held by others participating in the conversation. For example, rather than expressing our unedited animosity toward a rival football team, we may simply and calmly point out a few flaws in the team's roster when we are surrounded by that team's fans, assuming we choose to say anything at all.

In other settings we may find ourselves exaggerating our point of view to stand out from the crowd and differentiate ourselves from others. Such behavior is common among those individuals acting with self-enhancement motivations. Rather than trying to alter the view we express for the purposes of conforming to the opinions of others, we may use words or ratings that connote a more extreme sentiment. Or we might relish the opportunity to play the role of devil's advocate and highlight the negative aspects of a product when the predominant opinion is positive (and vice versa).

It is easy to think of reasons why we might allow these social dynamics to affect our behavior in an intimate group setting with friends and family. If we are going to repeatedly interact with members of the group, it's worthwhile to avoid direct conflicts, especially if it's as easy as tempering our statements or letting something slide when we're not particularly invested in the topic. Yet, similar dynamics have been found to exist in large and anonymous online opinion environments. We refer to these dynamics as *adjustment effects* in online opinion expression, where the opinions that have been previously expressed by others can influence how we express our opinions on social media.

The social media comments of others can affect our own opinions at two different levels. At the deepest level, we may actively take in the opinions of others and process this new information. Combined with our prior opinion, we may reevaluate our beliefs. In such circumstances, the social context influences our opinion formation process and the opinion we hold fundamentally changes as a result of our social encounters. Alternatively, we may find ourselves altering only the opinion that we express. In these cases, our opinion has not actually changed and the social context affects only our opinion expression.

Our ability to measure public opinion by monitoring social media activity depends on our ability to separate the effects that social context has on opinion expression from any true shift in underlying opinion.

## **A New Paradigm for Market Research**

When conducting traditional marketing research, organizations typically start with a clear objective that defines the information needed before setting out to collect data. The research program is then designed around this objective. Before investing in a new product concept, for example, a brand would design a research study to gauge the likely market demand for it. Before launching a new advertising campaign, a brand would copy test messages to determine how the target audience will respond to the language used in the ads. In both cases, the researcher sets out to measure a specific response to various elements of the organization's strategy. Are consumers more or less likely to buy the product if the price were a little higher or if the product's design were a little different? Are consumers more or less likely to remember the ad if it features a female spokesperson or a male voiceover? Historically, we've known exactly what we wanted to measure, and we set out to collect that piece of information before finalizing our strategies. However, the nature of social media data has forced us to rethink the standard approach to research. Instead of researchers seeking out potential consumers to participate in a study, these consumers are already expressing their unsolicited opinions online, and all the social media researcher needs to do is to compile these opinions.

A business that has recently made significant investments to improve their customer service might evaluate how the changes they put in place have affected customer satisfaction by monitoring social media. One approach to doing this would be to compare the volume of negative comments posted to various social media platforms before and after the changes were implemented. In this case, like in the case of traditional market research, the business has a clear research objective in mind, and social media simply provides the data that surveys and focus groups have provided in the past.

However, social media data has also opened up new research opportunities. Not only can researchers look to social media to answer specific questions, but they can also turn to it to identify issues that might have otherwise been overlooked. Because of their freeform nature, online opinions don't always map perfectly onto the questions that organizations are asking. Social media chatter around a brand may focus on an issue that the organization hadn't thought was all that important; and social media monitoring can uncover issues that might have slipped through the cracks if a more traditional market research approach had been used. For example, a computer manufacturer might be convinced that their recent price increase caused a precipitous decline in sales. But the social media chatter might indicate that their customers haven't really noticed the price change at all and that the company's focus on price was misguided. Instead, potential customers have been dissatisfied with the customer service that had recently been outsourced to another country, an issue the company hadn't considered.

While social media data is rich with potential, the enormous volume of data presents real challenges. Chief among these challenges is distinguishing signal from noise. In 2012, President Barack Obama had over 21 million followers on Twitter and, in a 24 hour period, was mentioned hundreds of thousands of times by other Twitter users. McDonald's had over 25 million fans on Facebook and over 3 million comments posted to their fan page. With this volume of information, how can any decision maker efficiently extract insights to guide their decision making process?

One answer is to monitor and track “everything” -- every comment, from every contributor, with information on every contributor, going as far back in time as possible. While such data has the potential to provide rich insights, simply warehousing massive volumes of social media comments is not a strategy. It is just the first step toward developing social media intelligence capabilities. The key to social media intelligence is not the data. The data are, in fact, nothing more than the raw ingredients of a complex recipe in which tools and analytic methods take the data as inputs and turn it into a rich source of intelligence.

A number of organizations are already taking steps in the right direction by compiling quantitative metrics that characterize and describe the body of comments posted online. But many analysts amass collections of metrics based on what calculations are possible instead of thinking about what measures are useful in our decision making.

To transform online chatter to social media intelligence, organizations should employ the following **five-step process to measurement**.

1. Measure what matters
2. Cast a wide net
3. Analyze the text
4. Understand the biases
5. Establish links to performance metrics

## Intelligence Integration

In early 2011, Pepsi made headlines by announcing that after more than 20 years, they would forego advertising during the Super Bowl. Instead, PepsiCo decided to award more than \$20 million in grants to fund community projects. Anyone could submit a grant application online, and award winners would be chosen by popular vote. News of Pepsi’s contest spread across social media, and with each mention, the Pepsi name was further associated with a philanthropic brand image. Contestants extended the brand promotion as they campaigned for their own personal causes, driving more traffic to Pepsi’s website.

In a similar move, Procter and Gamble, one of the world’s largest marketing organizations, announced in February 2012 that they would reduce their marketing budget by \$10 billion over the next four years. Much of the savings would be achieved by shifting their efforts away from traditional offline marketing methods in favor of digital marketing tools such as online banner ads, viral marketing, and social media marketing.

Why did these organizations decide to reallocate their marketing efforts in favor of online media? One reason is that digital marketing provides increased accountability. The technology available to collect online data allows firms to measure the number of people exposed to specific marketing messages and track how they respond to these messages more easily. Do those who are exposed to an online ad click on it? Do they eventually purchase the product advertised? Do they share the brand message with friends? This aspect of digital media creates rich fodder for marketing research and analysis. Digital marketing also tends to be more cost effective than traditional offline marketing. Production of the ad content is less expensive, and the media placement costs are also lower for a comparable audience.

However, while many companies have been assessing the costs savings associated with shifting advertising online, discussion of changing the scope of marketing research and intelligence to encompass the online space has lagged. This is despite the fact that the data available online, especially

social media data, is rich and plentiful. This is not to say that organizations are not investing in efforts to monitor online social media – they absolutely are. But organizations have been hesitant to invest heavily in social media intelligence or divert resources from their traditional research activities to fund social media intelligence operations.

Their concerns are centered on the reliability of the results. The methods used in traditional marketing research have been developed and refined over decades to ensure that the results are accurate, representative and free from bias. In contrast, social media intelligence is only just emerging and, as we've discussed throughout this book, there is just cause for concern regarding the biases inherent to social media data. Here, we discuss the benefits and challenges of social media intelligence and compare this new source of intelligence and insights to other research methods that organizations have already integrated into their strategy and operations.

Organizations have relied on a variety of marketing research methods to assess customer satisfaction, measure brand equity, gauge likely market response to a new product or strategy and so forth. These methods are critical for informed decision making and have been tried and proven over the years. However, each approach has its unique benefits and challenges.

To better understand the value that social media intelligence brings to the existing repertoire of methods, we first describe the issues associated with traditional research methods before discussing how social media intelligence compares and fits in. In this chapter, we will discuss how social media intelligence fits in with traditional marketing research methods and can help organizations track their brand health and understand their market structure. We also examine how we can integrate our market research efforts with the customer's social shopping experience and other functions of our organization. We conclude this chapter by discussing social media metrics in intelligence dashboards that provide inputs and feedback on our organization's strategies.

## Tracking Brand Health

Brand tracking surveys are very common place. Marketers are continuously measuring the health of their brands by asking questions like: *Are you satisfied with Brand X? Would you purchase Brand X again? Would you recommend Brand X to a friend or colleague?*

However, in recent years, researchers have been looking toward social media metrics based on the average sentiment expressed in a post, the number of followers or fans and so forth. While these metrics are derived easily and may be interesting to track over time, marketers have struggled to use this information in any meaningful way, and for good reason. Brand tracking surveys have been refined and tested over decades. Brand managers have implemented brand tracking surveys for years and have had reasonable success with the metrics the surveys produce. In contrast, social media metrics are still novel and there has been little testing of the value of social media metrics.

One recent study compared a brand's social media sentiment metric to the same brand's offline brand tracking survey and found little to no relationship between the two. Organizations across industry sectors have tried to reconcile their social media metrics with the offline metrics that they have been accustomed to using but have had little success. Given these results, it is no surprise that social media metrics are treated more as a novelty than a critical decision aid.

What factors can affect our expressed sentiment how can we adjust for them? First, expressed sentiment is driven by two distinct types of opinions: those we hold toward the performance of the product itself and those we hold toward the overall brand. But social media metrics rarely recognize the difference between our product opinions and our brand sentiment. This can be particularly problematic when the brand consists of a portfolio of products, and we measure brand sentiment by aggregating

opinions across products. For example, we tend to measure sentiment toward the Pepsi brand by considering all social media comments that mention “Pepsi” without considering which specific Pepsi product the comment was about. The resulting metric is less informative than one that separates the brand effect from the product effects.

Second, product opinions can further be decomposed into attribute-specific opinions. I may have an overall positive opinion toward a new restaurant but may not be thrilled at its price. If I were to provide a general review of the restaurant, the sentiment expressed would be quite positive. But if, for some reason, I am prompted to discuss the price I paid for the meal, the opinion will be a bit more negative. In other words, the sentiment expressed will vary depending on the attribute featured in the comment. As a result, sentiment metrics that ignore attribute differences will provide a distorted view of overall product opinion.

Finally, as noted previously, there are also differences across venues. Some venues tend to host more positive opinions while others seem to attract more negative opinions. Social dynamics also vary from one venue to the next, further exacerbating the differences across venues. Ignoring these difference can lead to biased metrics.

When we explicitly account for the influence that products, attributes and venues (including venue-specific trends) have on our sentiment metrics, what we're left with is a measure of general brand sentiment that is highly correlated with similar measures obtained from offline brand tracking surveys. We can build a statistical model in which we extract the effects of each of these factors or, at the very least, we can simply disaggregate our metrics to report product, attribute and venue specific metrics. With respect to the former, research has shown that statistical models in which a general brand sentiment is measured separately from the effects of specific products, attributes or venues, have been able to provide brand sentiment metrics that actually lead offline brand tracking surveys. That is, shifts in brand sentiment (perhaps due to a recent news event or announcement) appear in social media metrics before the survey-based metrics.