



## **Social Media Metrics**

### **Listening, Understanding and Predicting the Impacts of Social Media on Your Business**

Insights from a May 2010 workshop on social media metrics, presented as a Marketing Lab session at the eMetrics conference in San Jose, CA

Featuring:

**Katie Delahaye Paine**, CEO, KDPaine & Partners

**Mark Chaves**, SAS Director of Media Intelligence, Customer Intelligence Product Management

Although relatively new on the scene, social media is spreading fast. By some estimates, social networking now accounts for 11 percent of all time spent online in the US. Between December 2008 and December 2009, total visits to the top 10 social networking sites increased 63 percent. Nearly one in 10 Internet visits ends up at a social network; nearly one in four page views is on a social networking site.

The conversations taking place on these social networks can build or erode your brand, your reputation, leads, sales and revenue. Outspoken and respected individuals can influence masses of friends and followers to change their opinions about you. They can trash you or defend you. You can assuage them, cultivate them and turn them into your strongest advocates; or not.

Collectively – representing more than 100 million unique visitors and more than a billion tweets per month – social media is a force too powerful to ignore.

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## **How Do You Measure and Manage the Impact of Social Media?**

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There's a wealth of customer and business insight to be found in all these interactions. But organizations are struggling to understand, measure and capitalize on this untamed, open forum. Savvy marketers are reading and responding to social media content, but few organizations consolidate and analyze it in a systematic and strategic way. It is no wonder; harnessing data from the ephemeral, global conversation is like herding cats.

Effective social media measurement is the leading topic in marketing right now, and rightly so. That's why SAS partnered with the leading measurement and accountability research consultancy to discuss the topic in a workshop at the May 2010 eMetrics conference in San Jose, CA.

Social media requires marketing professionals to completely rethink their definitions of success, said Katie Paine, CEO of KDPaine & Partners. "The whole world has fundamentally changed with the arrival of social media. For years and years and years, everybody counted 'eyeballs.' Eyeballs were important because way back in the history of time, Proctor & Gamble and AT&T and all these people figured out that if your message or ad was seen by a certain number of people, you would sell a certain number of bottles of shampoo. This was simply accepted as fact, that eyeballs were good because they sold stuff."

Marketers carried that traditional metric with them even as marketing shifted into the online world. Then, eyeballs became "hits." The numbers were much larger, so sales would follow accordingly, right? "Sometimes it was true, and sometimes it wasn't that true," Paine said. "I've been arguing for years that hits stands for 'how idiots track success,' because fundamentally, unless you sell something, save money or do something differently as a result, hits don't matter."

A hit only tells you that somebody visited a piece of online content. It doesn't tell you about the visitor or what was subsequently done with the content, if anything. It doesn't tell you about the full dynamic of what is now a two-way mosh pit of open conversation.

Now the Holy Grail is “engagement,” Paine said. “Proctor & Gamble last summer said to all of its media folks, ‘We’re no longer paying you for eyeballs. We don’t care about how many eyeballs there are, all we care about is engagement.’ Needless to say, the media folks said, ‘What’s engagement?’ And they said, ‘We want some evidence that the people you’re reaching are at least alive and at least somewhat interested in the brand. If they clicked on something, bought something, downloaded something, retweeted something, or said they liked us, then we have some sign of life out there. That’s what we’re going to pay for.’ Good thinking.”

A 2009 IBM study of 250 chief marketing officers revealed that organizations are shifting significant amounts of money away from traditional advertising and into public relations, particularly mobile and online channels, Paine said. “So measurement is shifting away from ‘impressions’ and ‘eyeballs’ and toward ‘engagement’ and ‘impact-based metrics.’ This isn’t me saying this; this is 250 CMOs out there who are predicting that most of this will happen within the next three years.”

So, what exactly is engagement? Paine classifies information consumers into five levels of engagement, based on how they interact with online channels.

- At the most passive level are the **Searchers**. They scan online resources to find specific information and largely ignore social media. A count of unique visitors captures your best view of this silent group.
- Next are the **Lurkers**, who listen in on the conversation but don't participate. These users can be tracked as repeat visitors above a certain frequency, say, more than three or five visits per month.
- Somewhat more engaged are the **Casuals**, who participate lightly in social media. They might be identified through metrics such as percentages of visitors who post comments or who become your friend on Facebook or your follower on Twitter.
- Higher up the value chain are the **Actives**, who retweet to others, regularly participate in interactive threads and post comments frequently.
- Most organizations would love to cultivate the strong voice of **Defenders**, those who serve as your most influential ambassadors – advocating, recommending and defending the brand.

■ “There are no ‘eyeballs’ in social media. It’s all conversations. And it’s not just about marketing anymore. With all the conversations happening in the social universe, it’s imperative we learn to capture, analyze and act on this up-to-the-minute data.”

**Katie Paine, CEO  
KDPaine & Partners**

“There’s a totally different dynamic going on now,” said Paine. “It’s not just about pushing your message out there and hoping that awareness leads to preference and then purchase. It is about a far richer and more complex set of interactions. As Proctor & Gamble was quick to realize, you don’t necessarily need bigger numbers; you need more engagement – the ability to turn disinterested Searchers into Casuals who hang out on your site for a while, then into Actives and Defenders.

“All of those folks out there who are still trying to count eyeballs are going to be left in the ditch if they don’t come up with a better way to understand the impact of all these conversations,” said Paine. “While you’re out there measuring hits and downloads, there is so much else going on in the marketplace. If you don’t take all that into account, your data is fundamentally incomplete.”

Paine presented her battle-tested seven steps to an effective social media measurement system:

1. **Define the “R,” the expected results.** As with traditional media, the goal determines the metrics. According to Paine, social media goals fall into three primary categories:
  - **Marketing** – building awareness, generating leads and sales.
  - **Communications** – engaging with people in support of a civic or safety mission.
  - **Perception** – improving the organization’s relationships, reputation or positioning.
2. **Define the “I”** – what’s the investment? Social media is not free. It costs about \$10,000 to run a contest on FaceBook, for example. And you have to pay people to read and respond to social media sites. The payback can be tremendous, but you do have to know what and where to invest, to expect to show credible ROI.
3. **Understand your audiences and what motivates them.** This knowledge determines which channels to focus on, what tone of voice to adopt, and what types of responses, offers and online content to provide.
4. **Define the metrics (what you want to become).** Click-throughs, unique visitors, repeat visitors, number of friends, followers, comments, repeat comments, tweets and retweets ... metrics will vary by goal, audience and vertical market.
  - If your goal is marketing-oriented, your metrics could include percent that are hearing, percent that are believing (as determined by surveys) and percent that are acting.
  - If the goal is awareness, you could assess the degree to which the messages are not just communicated, but passed along and picked up on other websites, feeds, threads and blogs.
  - If the goal is improving reputation and relationships, your metrics could revolve around relationship scores (based on analysis of specific phrases that determine the state of relationships), recommendations, positioning and engagement.

“Ultimately, you want those Defenders out there. They’re the ones who will come out and say, ‘You know what, I don’t care if that airline lost your baggage last week; I still love them because they treated me great.’”

**Katie Paine, CEO  
KDPaine & Partners**

5. **Determine what you are benchmarking against.** How do your social media metrics compare to your closest competitors? To industry leaders? To your performance last quarter or last year?
6. **Pick an analytical tool and conduct research.** Mine some actionable insights out of structured data (hits, unique visitors, frequency of visits, etc.) and unstructured data (free-form text in comments, tweets, blog entries, articles, etc.).
7. **Analyze results and glean insight, take action, measure again.** Do this in a continuously improving, closed-loop process.

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## Exploit the Volumes of Information Found in Social Media

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There is valuable insight contained in all the user-generated content on social media sites. But how do you dig it out of dozens of review sites, thousands of blogs, millions of Facebook posts and billions of tweets?

“Once you get your head around what you’re trying to accomplish – your goal for social media – there are some very sexy, shiny new tools to help you track and analyze all that,” said Paine. These analysis tools fall into three broad categories:

- **Descriptive statistics** clarify activity and trends, such as how many followers you have, how many reviews were generated on Facebook, and which channels are being used most often.
- **Social network analysis** follows the links between friends, fans and followers to identify connections of influence as well as the biggest sources of influence.
- **Text analytics** examines the *content* in online conversations to identify themes, sentiments and connections that would not be revealed by casual surveillance.

Our presenters offered some recommendations and best practices for organizations that hope to use these tools to affect change and improve performance, not just generate hindsight reporting.

## Think of Measurement as a Guidance System, not a Rating System

“Measurement shouldn’t be about punishment or rewards,” said Paine. “It is about figuring out what the most effective tools are, what needs to be discontinued because it doesn’t work, and what needs to be done more because it *does* work.”

“A good analytics system will tell you where you need to focus. Maybe all that emphasis on FaceBook doesn’t really matter, because that’s not where your audience is. Maybe they’re all on Twitter, or vice versa.”

Channel preference won’t necessarily be intuitive, said Mark Chaves, SAS Director of Media Intelligence, Customer Intelligence Product Marketing. “We just worked with a hotel that had virtually no activity on Twitter for one brand but lots of Twitter activity for one of their higher brands.” Without an accurate measurement tool, you wouldn’t know.

## Track the Elusive Sentiment

Customers want to take what they are hearing and learning from online conversations, and put some action to it, said Chaves. “The key lies in being precise in extracting and tagging sentiment.”

Text analytic tools can categorize online content, uncover linked concepts, and reveal the sentiment in a conversation as “positive,” “negative” or “neutral,” based on the words people use. The technology gets down to very specific elements and can separate positive and negative remarks within a single comment.

“A mixed-polarity phrase, such as ‘hotel in great location but bathroom was smelly’ should not be tagged as ‘neutral,’ if you want it to be actionable,” said Chaves. “Be specific; ‘bathroom was smelly’ is something someone can own and improve upon.”

You can classify and categorize these sentiments, look at trends over time, and see significant differences in the way people speak either positively or negatively about you. Furthermore, you can compare sentiment about your brand to your competitors.

## Continuously Improve the Accuracy of Text Analysis

An industry-specific text analytics package will already know the vocabulary of your business. The system will have linguistic rules built into it, but it learns over time and gets better and better. Much as you would tune a statistical model as you get more data, better parameters or new techniques to deliver better results, you would do the same thing with the natural language processing that goes into sentiment analysis. You set up rules, taxonomies, categorization, meanings of words; watch what the results look like, and then go back and do it again.

“Ideally, you would love to be able to attribute sentiment to a specific business unit. The more precise you can get in understanding the tone and perception that people express, the more actionable the information, because you’re mitigating concerns about mixed polarity.”

**Mark Chaves**  
**SAS Director of Media Intelligence,**  
**Customer Intelligence**  
**Product Marketing**

## **Look at the Ripple Effect**

It's one thing to get a great hit on a high-profile site, but that's only the start. There's a difference between a great hit that just sits there and goes away, versus a great hit that is tweeted, retweeted and picked up by influential bloggers. Analysis should show you which social media activities go "viral" and which quickly go dormant – and why.

"Generally I'm interested in seeing the actual spread of a specific message, tracking keywords," said an audience member. "If we place something in the *Wall Street Journal*, that's awesome. If 15 other people pick it up because of that, that's a better story for me. If it gets picked up by multiple blogs, I want to know what the conversation around that looks like. Are there themes or clusters or specific terms that are emerging? Should I be encouraging the conversation, responding or correcting?"

## **Look Beyond the Brand**

The biggest mistake people make is to concern themselves only with looking up their brand, said Paine. "That's the last thing you want to do." To successfully analyze and act on social media, you need to understand not just what is being said about your brand, but the broader conversation about the spectrum of issues surrounding your product or service.

"First you have to define the marketplace, the topic, the universe of conversations," said Paine. "Customers don't fundamentally care about you or your message or your brand. They care about themselves. So you want to know what *they* are talking about, where they are talking, and where their interests are."

## **Identify Your Most Powerful Influencers**

Organizations struggle to identify who has the most pull in shaping public opinion, Chaves said. "Customers often say, 'There are hundreds of people out there talking about us; help me gauge and rank the ones we should be engaging.' We do some data mining to identify who are those influencers – both consumer-generated influencers and professionals." These are the people you'd want to target with special campaigns/offers and proactive communications.

Your most important influencers are not necessarily the ones who advocate specifically for your brand; they are the ones who influence the whole realm of conversation about your topic, said Chaves. "Are they saying nice things, expressing support or simply making observations or critiquing? What is the nature of their conversations? How is my brand being positioned relative to the competition in that space? Once you have that big, broad picture, then you can build your strategy."

## Look Closely at the Accuracy of Your Analytic Tool

Until recently, computer-based tools were not as accurate as humans for sifting through online content, said Paine. “If you train readers well and give them very specific coding instructions, you can get two readers to agree 88 percent of the time, on average. The [automated] system I initially used and then discarded was 45 percent accurate. The best I’d ever had, prior to using SAS®, was 65 percent accuracy. So when SAS Social Media Analytics gets up to 90 percent accuracy, I say, ‘Okay, I believe it; computers can actually do this.’”

“Accuracy varies depending on the media,” Chaves noted. “For product review sites, hotel review sites and Twitter, it can reach anywhere between 80-90 percent accuracy, because the context is more boxed in. When you start looking at blogs and discussion forums, where the conversation is more wide-ranging, the software can deliver 60-70 percent accuracy.”

These figures will increase over time, because the open system is continually upgraded with new rules and improved algorithms to reflect field experience, new products, changing market conditions and emerging patterns of speech.

## Incorporate Social Media Intelligence into Planning

Once you have big-picture perspective and detailed insight, you can begin to incorporate this information into your planning cycle. But that is easier said than done. A quick audience poll revealed that very few people currently incorporate learning from online conversations into their planning cycles. “Many organizations are still struggling to understand how to use this rich new data source,” said Chaves.

A first step is to find time-linked associations between social media metrics and other business activities or market events. “Social media is typically either organically invoked or invoked by something your organization does,” said Chaves. “If we saw a spike in activity in April, we want to know, what was behind that?”

An analytics tool should be able to show you trends in positive, negative and neutral activity, and enable you to drill down and see the actual comments. By seeing changes over time, you can correlate social media trends with the circumstances that triggered those trends, such as: traditional marketing activities, organizational or product changes, world events and market conditions.

“One tool out there arbitrarily determines that a FaceBook friend is worth \$5 and a Twitter friend is worth \$3. Where is the accuracy in that? Where is the data that says that is true?”

**Katie Paine, CEO**  
**KDPaine & Partners**

“The computer system for social media analysis has to accommodate adaptive learning, to improve accuracy over time. With closed ‘black box’ systems, you can’t make them more accurate or adapt them to new conditions and conversations. The beauty of the SAS system is that you can actually teach it to become more accurate over time.”

**Katie Paine, CEO**  
**KDPaine & Partners**

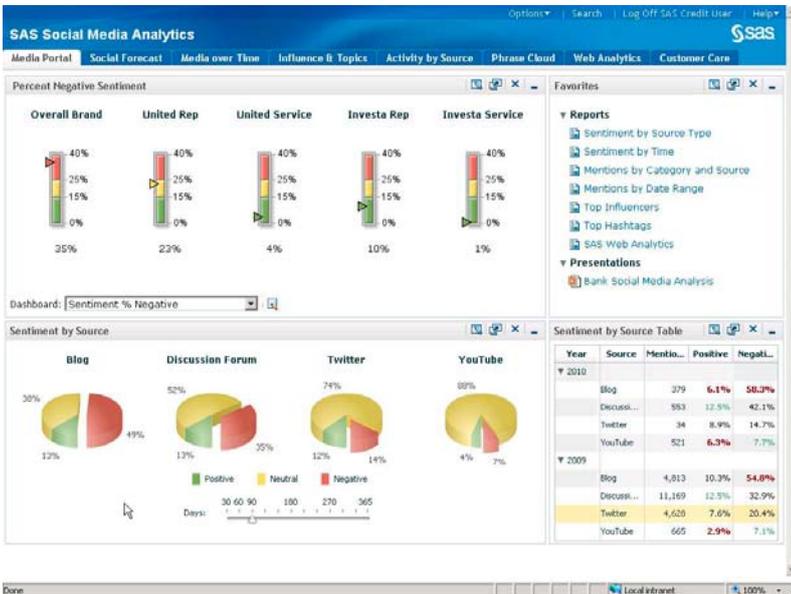


Figure 1. SAS Social Media Analytics lets you track trends in positive, negative and neutral activity.

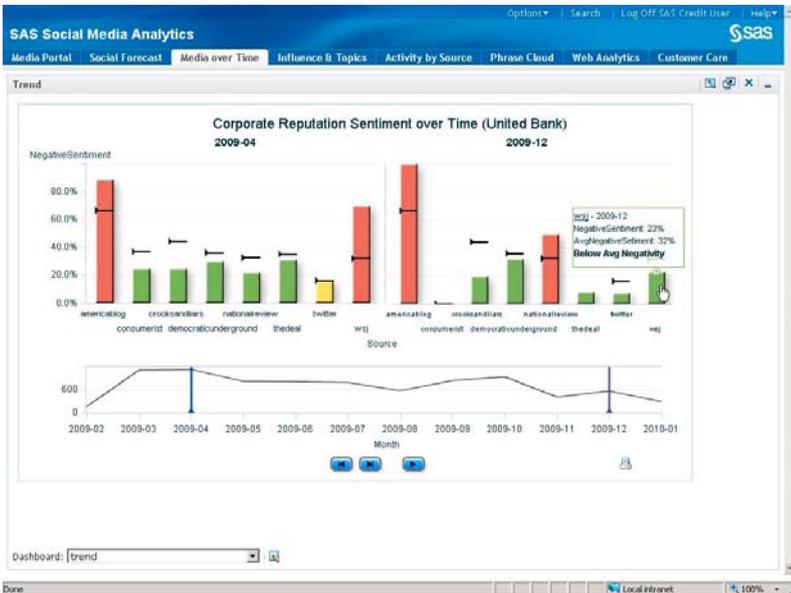


Figure 2. Track trends over time with SAS Social Media Analytics.

Suppose you were a retailer anticipating a peak of activity for back-to-school shopping in August. It would be helpful to know what people were talking about in August last year, and where, down to the specific website – and use that information in your planning.

Chaves provided a second example of a financial institution that saw a rebound in positive sentiment immediately after announcing its plans to pay back TARP (Troubled Asset Relief Program) funds. “If you can track dynamic changes in sentiment over time, and pinpoint the time frame, you can associate it with changes in the business or market climate.”

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## Closing Thoughts

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Social media holds tremendous power and promise for organizations of all types. It can heighten brand awareness, open new touch points to spread your message, drive people to your website, and boost search engine rankings, awareness and affinity. Social media has the potential to deepen the relationship with customers and their social connections on many levels and over time – at remarkably little cost.

Social media sites are proving to be serious sales channels as well. For instance, Dell did \$6 million in Twitter direct sales last year. Humane Society of the United States raised \$650,000 from an online contest that only cost them \$1,000 to set up on Flickr. A major food service company improved personnel recruitment efforts so much by using Twitter that they eliminated their entire \$300,000 Monster ad budget, Paine said.

Who would want to overlook so powerful a social force? New analytic tools, coupled with best practices, enable organizations to maximize the triple value of social media – as an outbound channel, inbound touch point and wellspring of new intelligence.

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## About SAS®

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SAS has helped organizations across all industries realize the full potential of their greatest asset: data. Simply put, SAS allows you to transform data about customers, performance, financials and more into information and predictive insight that lays the groundwork for solid and coherent decisions. That's why SAS is used at more than 45,000 sites in over 100 countries, including 92 of the top 100 companies on the 2009 FORTUNE Global 500® list. [www.sas.com](http://www.sas.com)

SAS Social Media Analytics is an enterprise hosted solution that integrates and analyzes content gleaned from online conversations on professional and consumer-generated media sites. It enables organizations to attribute online conversations to specific parts of their business, to respond quickly to opportunities, shifts in sentiment and changing market conditions.

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## For More Information

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To learn more about the topics described in this paper, visit the SAS blog, Get, Grow, Keep: Successful Customer Intelligence Strategies from the Field. <http://blogs.sas.com/getgrowkeep>



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