

Social Media Analytics

Social media, which are easy-to-access tools that allow digital communication and collaboration, are increasingly making an impact on the corporate world. Social media has expanded from its genesis in the consumer space to the point at which its effect on brand and corporate reputation can be instantaneous and far-reaching. Thus companies are discovering the need to monitor and measure this growing space.

This paper explains the importance of social media, business need for its measurement, limitations of standard web analytics solution in capturing social media and an approach to define measure and analyze social media in individual business context.

At a high level, the intent of this paper is same as social media – to start a conversation. This paper is only an initial attempt to measure social media, to establish a social analytics framework which will evolve with time, available technology and ever changing human behavior.

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Introduction

Today's brand building and marketing approach is a complex and taxing exercise and is primarily distributed into two channels; traditional medium and social medium. While traditional marketing programs like advertising, direct mail or other one-direction mediums are complicated, social media marketing is even more complicated because in social media marketing messages spread from individual to individual in a non-linear fashion. This complexity has affected a common belief on social media strategy and operations.

However, before creating a strategy for building a brand using social media, it is essential for a business to familiarize with the social media concepts, understand how to define, track and measure social media, and how to derive a convincing and acceptable return on investment formula, aligned with the brand's core business objectives.

This paper outlines a high level approach that a business can possibly adopt to embark in its journey of social media marketing followed by investment optimization through intelligent collection, measurement and analysis of metrics.

Beyond Web Analytics – Need for Social Media

Web analytics is the process of measurement, collection, analysis and reporting of internet data for the purpose of understanding and optimizing web usage. Web analytics helps in measuring internet traffic and also serve as an effective tool for business and market research. Effective web analytics can produce information ranging from potential audience (opportunity), share of voice (visibility) , buzz (comments) to specific Key Process Indicators (KPI) for drivers and conversions such as hit count, page view, visits / session, unique visitor, repeat visit, impressions, singletons, bounce rate, visibility path, click path, active time to engagement time and so on.

Web analytics is a matured science with a good amount of synergy and consistency on the metrics. It also has KPI's that are usually defined, captured and monitored for effective exploitation of a business's online properties. Web analytics does live up to its promise of providing online metrics, proving to be an overall successful model. Advertisers know exactly how many people saw (visited pages having) their advertisements and how many people clicked on them. But they still have no idea about how many people saw their billboards or newspaper advertisements – and even less about how many people really "cared".

On the other hand, we are now accustomed with the phrases such as "crowd sourcing", "wisdom of crowds", "engagement and empowerment", "word of mouth" and so on. Starting with more of casual, informal networking and getting-in-touch, this form of media, called as social media, has today become so powerful that marketers are not able to ignore it anymore. Today consumers have unprecedented reach and power by which they can share their brand experiences and opinions about any product or a service. Consumer voices can wield enormous influence in shaping the opinions of other consumers and with a cascaded effect, their brand loyalties, their purchase decisions, and their own brand advocacy.

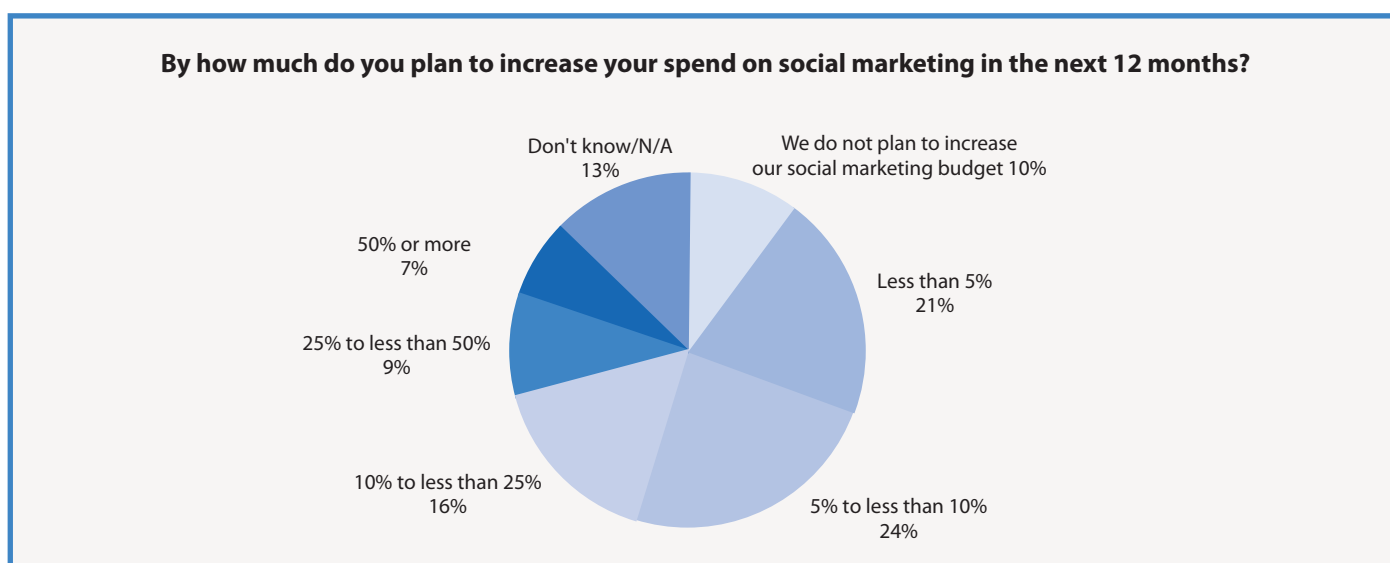


Figure 1 Social Marketing Spend Forecast

However, while the marketers are well aware of this phenomenon, they are not very confident on how to harness the most meaningful, relevant and insightful information out of peta-bytes of social media on the internet. Moreover, most standard web analytics solutions lack maturity and completeness to effectively capture social media metrics and provide the much needed insight to the marketers.

Using Social Media Analytics – Business Drivers

While adopting and embracing social media into mainstream corporate is a rising phenomenon, each organization will have its own specific motivations for adopting social media and therefore will have different set of analytics framework. Some of the key drivers for adopting social media include:

- Market Research and new product development.
- Top pressures driving social media monitoring.
- Need of better consumer insight.
- Need to gain competitive intelligence.
- Need to improve customer satisfaction.
- Need to develop new products and services.
- Need to increase Return on Marketing Investment(ROMI)
- Top strategic actions to maximize social media spend
- Improve ability to respond to customer wants and needs
- Build social media measurement into marketing campaigns and brand promotions
- Maximize marketing campaign and effectiveness
- Align social media monitoring capabilities to overall business objectives

However, today many companies are stumbling blindly into social media marketing without the rationalized measurement framework in place. A pragmatic approach using metrics, derived from sound business objectives, minimizes confusion about the value of different social efforts.

Guidelines to Define Social Media Analytics

Social media analytics means definition and adoption of new metrics for measuring success, given the difficulty of quantifying the business outcomes of social media monitoring and analysis activities using traditional marketing services.

Before going further, it is important to define two key terms “metrics” and “measurement”. Although these two terms are linked to each other, they are often misused or used interchangeably. “Metrics” refers to the terms or parameters that an organization wants to understand. In social media circle, the word “attribute” is also used interchangeably. “Measurement” on the other hand is the next step – the process of taking these metrics or attributes and determining how they are impacting the actions of an organization, such as a marketing campaign or a crisis.

As discussed earlier, the social media measurement is becoming widely accepted as a necessary business practice. However, many organizations are finding it difficult to decide the exact metrics they need to measure on their social media initiatives. Indeed, there is no one way to measure. The metrics that is used to measure the success of one social media campaign might be drastically different from another, even for the same type of business. However a practical approach, to measure social media, is to start with the activities such as developing metrics to capture brand reach, tracking sales through social media and assessing the cost savings. Effective measurement of social media needs consideration of the following criteria:

- Objectives should be **s**pecific, **m**easurable, **a**ctionable, **r**ealistic, and **t**imed (following the SMART technology), and directly correlated to the organization's goals for the program.
- Effective measurement rarely sits and confines of a single metric, rather it is a combination of metrics that illustrates progress towards a goal. Metrics gain meaning when they are weaved together to help glean insights, and not just the data.
- Having a hypothesis to start from is important. For example: "Post activity on our help forum will decrease the call center costs. Thus the goals should be built based on the hypothesis. Subsequently the goals should be measured using social analytics to ensure that the goals are achieved.
- Measurement is a discipline and has to be wired into an organization.
- It is important to establish both qualitative and quantitative measurements for the goals, because both contribute in providing a holistic view of the social media program progress.

Social Media Analytics Development Approach

Social Media Analytics success metrics or Key Performance Indicators (KPI), that are developed with specific business objectives in mind, are far more likely to be useful and accepted. This ideology influences organizations to take a methodical, pragmatic and common-sense approach to measure social marketing initiatives.

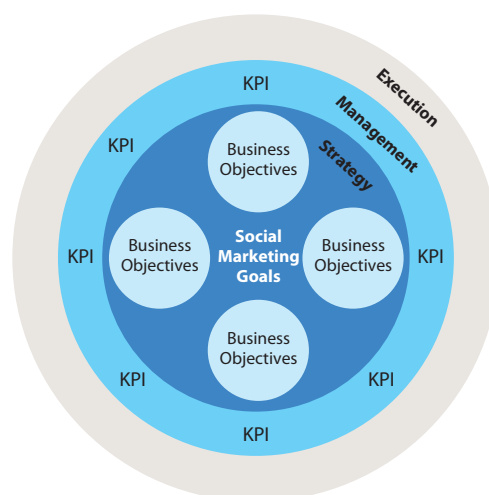


Figure 2: Social Media Measurement

Thus, no single set of objectives can accommodate all business models or corporate initiatives. The table below shows a possible mapping of the business objectives and KPIs based on a survey and study by Altimeter Group on April 2010.

Business Objective	Key Performance Indicator
Foster Dialog	Share of Voice Audience Engagement Conversation Reach
Promote Advocacy	Active Advocates Advocate Influence Advocacy Impact
Facilitate Support	Resolution Rate Resolution Time Satisfaction Score
Spur Innovation	Topic Trends Sentiment Ratio Idea Impact

While defining and establishing the social media analytics, marketers can adopt a twofold approach – qualitative and quantitative. The section below details some important metrics under each category which might be selectively adopted by a business as a part of their brand campaign and social marketing initiatives.

Qualitative Approach

Social media measurement is not just about the eyeballs (as with traditional television measurement), but about capturing the right eyeballs that can actually drive into action. The following section introduces some of the key metrics to gauge awareness, attention and reach that can be measured for a social marketing campaign. This section also briefly describes the approach mechanism to capture and decipher the same.

1. **Fans, Followers, Subscribers:** When talking in terms of number of fans, followers and subscribers, we are actually talking about the potential reach and not the actual reach. For example, when we say that 50% of active users log on to FaceBook every day, it means that only 50% have the maximum chance of seeing an update on a fan page, among all their other activities on the site. Thus the actual chance of a business content being viewed is much lower (20-30% for example).
2. **Share of Conversation:** Share of Conversation is a combination of a few metrics that gives some strong insight into how your online activities are directly impacting your overall goals and objectives. This metric helps you understand not just the volume of buzz about you, but how recognized you are among the conversations you want to be associated with. In other words, the right eyeballs.
3. **Strength of Referrals and Recommendations:** Another way of measuring the volume of attention your company receives is the number of referrals and recommendation you receive.
4. **Inbound Links:** Link love is still alive and doing well on the web, and it still matters. It is an online currency, contributing to aspects such as your visibility on Google. Measuring inbound links is fairly straightforward these days, but again, it is all about how you use that information to map other behaviors and insights.
5. **Social Bookmarks:** One way of looking at the extended attention, you or your content is getting in the social realm, is to look at how many times people are bookmarking your content on sites such as del.icio.us. This is another way of establishing the resonance of your content (produced by you or in which you are mentioned).
6. **Traffic from Shared Shortened Links:** Sites like Twitter have really ramped up the need and use for shortened links like TinyURL or Bit.ly to accommodate the character limits. But you can still track this in your overall website analytics to see how it drives people to your website and through conversion paths.

Quantitative Approach

No universally agreed measurement metric set seems to be emerging, leading to the need for identifying and defining multiple social media attributes that an organization can examine and consider as a part of its strategy. And while it is agreed that measurement tools and processes of the future will need to be flexible, having some kind of benchmark across the industry could yield benefits. Some variables that are usually collected and analyzed include:

- **Analytics and Activity** – This is similar to the usual monitor activity around a company website. The most common measurements in this area are focused on the attributes like page views, unique site visitors, etc.
- **Community Activation / Call To Action** – For many marketers, specific action is a way of measuring the success of any social media outreach. For example, in some cases, blog posts, podcast and video are designed to entice a given individual to learn more, tell others or perhaps embed a video player on his or her own post. The ability to measure such an activity is necessary to know the answers to some questions: is there a response to the outreach campaign? Are recipients reacting to the message?
- **Conversation Index** – This is a ratio between blog posts and comments-plus-trackbacks. This measures whether a blogger is doing a lot of writing and there is very little uptake or response from the readers, or the opposite – where the audience seems to be hanging on every word and eager to contribute to the conversation. This attribute is one subset of measuring participation and engagement.
- **Demographic** – This captures who is responding to the message, across multiple demographics: regional, professional, vertical and economic.
- **Influential Ideas (Meme)** – This refers to the intensity or velocity of the spread of an idea or message in a given time. A meme refers to an idea or discussion that grows and spreads from individual to individual into a lengthy chain of community. That is, how long does a message (or marketing campaign, or issue etc) remain in the arena of public opinion and interaction? Both in the corporate and consumer environment, a blogger should look for igniters. Igniters are the people who can, by virtue of a single post, ignite a long chain of dialogue and conversation across multiple blogs. However, there are many A-list bloggers whose ignition attribute is very low. They cover lots of ground, but it does not stimulate a long chain of dialogue.
- **Participation and Engagement** – Engagement is a tangible, measurable metric. It is similar to conversation index as it relates to the stimulation of discussion. However, participation means something deeper. Participation is where a recipient not only responds to a message but also acts on it. For the bloggers who are generating most original content, the participation of the audience is deeper. The audience is more loyal, more interested and more engaged.
- **Relationships and Connections** – The concept of influence within a specific community becomes increasingly important. While an A-list blogger may have a large, diverse audience, he or she may not have an intimate relationship with any specific influential individuals within a given community.

- **Relevance** – With the dropping barriers for the masses to make their voices heard using social media tools, the need is rising to isolate specific key ideas. While referring to your company or your competitors, the question is: how relevant, to my company, is a particular blog post among the hundreds of memes? This is a highly subjective but very important attribute and can vary from situation to situation.
- **Sentiment/Tone/Favorability** – Not only the response, of an audience or demographic, is important on an issue or a message, but also the tone or sentiment associated with a response. Generally the range in this category is “positive”, “negative” or “neutral”, but even this simple scale can become complex, as the content that is ironic or sarcastic (to choose two examples) can be misconstrued by the analysis that evaluates language too literally or by an audience whose interpretation can be subject to regional or cultural biases.

Summarizing Key Social Media Metrics

According to a recent Forrester report, marketers are showing augmented interest to harvest the rich trove of consumer conversations generated across all social media including blogs, message boards and social networks. The table below provides ten commonly used listening platform metrics:

Metric	Description
Conversation Buzz	The amount of discussion around certain topics, generally determined by the number of responses to blog posts or online discussions. A widely read news site may post a story, but if there are no comments and no readers discussing the topic, then it shows little consumer interest.
Conversation Value	The revenue contribution of a conversation about a particular product or brand. Proposed by Chat Threads, this metric comes from understanding how conversations spread through different channels and the incremental value of each conversation adds to the brand's bottom line.
Conversation Volume	The number of social media entities (blog posts, forum discussions, tweets, etc.) discussing a topic. Volume is a stronger metric when measured over time. Marketers use conversation volume to set baselines for future campaigns.
Demographic Metrics	The collection of metrics making up the background details of online consumers. Listening platforms can collect data on consumer location, gender, and age. Marketers use demographic data to determine whether their campaigns reach targeted consumers.
Level of Influence	The authority of an online consumer, measured by his or her overall reaches online. A consumer with a highly read blog and thousands of Twitter followers is assigned a high influence score, while a commenter on a small forum has low influence.
Message Reach	The number of eventual impressions of an online discussion. Measured by the number of different sources covering a topic and each source's potential page views. Many discussions start small, but once picked up by a larger source, will reach a large number of consumers.
Sentiment Type	The positive or negative attitudes consumers express, scored positive, negative, or neutral. Although many online brand mentions are neutral, containing no sentiment, listening platforms track adjectives around keywords to determine consumers' tonality about a topic.
Share of Voice	The ratio of discussion volume between multiple brands — often represented as a percentage pie chart. Many marketers track their brands against competitors' to determine which company has a larger share of voice.
Topic Frequency	The most common themes for consumer discussion around a brand. Marketers use topic frequency data to collect insight into how consumers view their brands and how they discuss them online.
Viral Factor	The amount and speed at which a discussion spreads, measured by the number of different entries around the same topic within a certain time period. Around a highly viral event, such as the Motrin Moms saga, hundreds of bloggers wrote posts the following days.

According to a Forrester report, social media analytics can be further associated with an ROI involving post evaluation processes that uses these metrics to understand the benefits, costs of a social media strategy over time. These metrics are translated into values as detailed in the table below:

Metric	Values	Benefit
Number of unique visitors, page views	Cost of advertising in similar content channel	Blog Traffic
Number of blog driven stories by offline press, web media or high profile bloggers	Cost of advertising in the same publication	Press Mentions
Percentage of search results landing in the first three search pages driven by the blog	<ul style="list-style-type: none"> Cost of search engine optimization to improve ranking Cost of paid search for blog-driven keywords 	Search Engine Positioning
<ul style="list-style-type: none"> Number of blog pages in a Technorati search Number of people commenting on a blog 	Cost of hiring a buzz agent	Word of Mouth
Number of times a year that blog comments provides useful business insight	Cost of a focus group or other market research tactic	Savings on customer insight
<ul style="list-style-type: none"> Number of press stories that mention UGC Change in net promoter score or other attitude metric score - UGC 	Historical change in sales associated with change in Net Promoter type metric	Reduced impact from negative user-generated content
Number of clients / prospects who read the blog, number of salesperson who read blog	Decrease in cost of sales	Increased sales efficiency

Monitoring Techniques

Technologies exist to facilitate data collection in diverse social media, but there are no silver bullets. Just as the social media metrics are volatile, so is the process to capture them. Social media is huge in volume and is scattered and unstructured across multiple sources all over the internet. Thus it is extremely important to know where to listen to, what to listen to and how to listen to. A pure technology solution would not be able to solve all these at once. The need is to have a robust technology solution, complemented with significant human intervention and intelligence to correctly define the goals and business drivers for caring about social media. Further it needs to be determined what metrics (as detailed in the table above) are most critical to validate that the overall business goals.

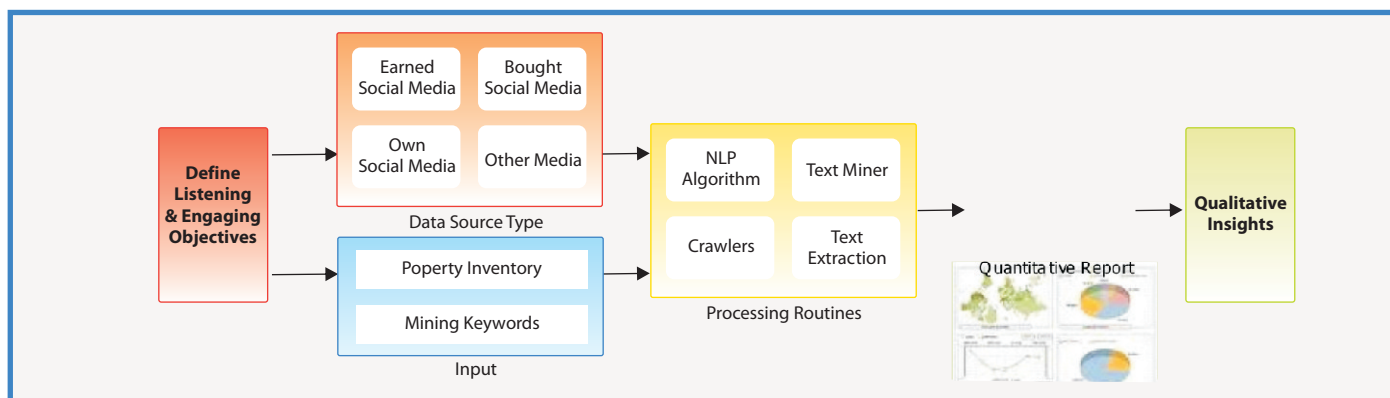


Figure 3: Churning Data for Listening Platform

There are listening tools and solutions available which enable brands to track their reputations, monitor crisis, collect customer feedback, measure campaigns, conduct customer research and most importantly better understand their customers. Listening platforms combine data collection, text analytics, Natural Language Processing (NLP) and dashboards into a single solution. Some platforms have proprietary technologies for data collection, which continuously cull sources, while others collect data on schedule, multiple times a day. Businesses which are focused on crisis management or consumer engagement will need solutions built on continuous data capture. But those businesses that are seeking episodic analysis can settle on platforms that collect data at regularly scheduled times. But data collection is only a part of the puzzle – marketers also need to evaluate the technology behind the data processing and support for multiple languages. Marketers who need to go beyond mentions and shares of discussion must look for tools that use NLP and advanced analytics for sentiment analysis and customer segmentation.

Moreover, there are third party sites such as www.sociafyq.com providing an aggregation of critical social media metrics from popular collaborative sites. The table below details some of the key sites and the metrics from them:

Site	Segments	Key Metrics
FaceBook	<ul style="list-style-type: none"> • Cause Page • Group Page • Fan Page 	<ul style="list-style-type: none"> • Number of Members, Growth of donations • Number of Members • Number of Fans
MySpace	<ul style="list-style-type: none"> • Site 	<ul style="list-style-type: none"> • Number of friends, number of comments
LinkedIn	<ul style="list-style-type: none"> • Profile 	<ul style="list-style-type: none"> • Number of connections, number of recommendation
Twitter	<ul style="list-style-type: none"> • Page 	<ul style="list-style-type: none"> • Number of Following • Number of Followers • Number of Favorites • Number of Updates
Friend Feed	<ul style="list-style-type: none"> • Page 	<ul style="list-style-type: none"> • Number of subscriptions • Number of subscribers • Number of comments • Number of likes
Google Blogs	<ul style="list-style-type: none"> • Key-phrase Volumes • Feed 	<ul style="list-style-type: none"> • Google Blog Search • Bloglines Search • Technorati Search • IceRocket Blog Search • BlogPulse Search • Number of daily posts
YouTube	<ul style="list-style-type: none"> • Channels • Groups • Video Page 	<ul style="list-style-type: none"> • Number of views • Number of subscribers • Number of videos • Number of comments • Number of friends • Number of videos • Number of members • Number of discussions • Number of views • Number of comments • Number of ratings

The Way Forward

Social marketing and media monitoring is emerging as a key trend at an outstanding rate. Today there are more than fifty prominent vendors working on specific measurement solutions. In addition, there are channel specific tools that monitor social applications like micro-blogging, video or mobile apps which are even more prolific, offering an abundance of choice for organizations intending to measure social marketing. However, amidst this bounty of resources and abundance, confusion exists. Marketers are not sure how to standardize and define a framework for social media measurement. Furthermore, even when the metrics are defined, current products and tools available in the market does not support adequate handling of the needed metrics. But the good news is that social media monitoring tools are improving every day. As this nascent field of social marketing grows, so do the vendor's abilities to capture and harness the insights from data generated through social activity.

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