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Strategy for Social Engagement & Monitoring: Transforming Noise to Signal

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Introduction

The debate surrounding the validity, longevity, and value of social media has given way to a spirited discussion as to how companies glean insight from social media and leverage it across the organization. A concept gaining traction is to extend traditional customer relationship management (CRM) to include social relationship management (SRM). The interactive and multidirectional nature of social channels has given customers ownership of the conversation, and they are controlling media in ways never thought possible. At a minimum, social relationship management needs to enable organizations to gain insight and information from across all social media touchpoints and take action with consumers by engaging online and participating with them via communities and conversations.

While simply listening or collecting the millions of conversations that occur daily is a necessary and important function, it is not sufficient to gain true insights into your customers. In order to gain actionable insights and real knowledge, you need to analyze the data. The optimal social media analytics solution will have both the base functions of data refinement and the more-advanced analytical functions of data associations.

It is feasible to gain insight from the millions of daily conversations through manual or semiautomated methods, and you can probably do this by employing a large internal team or outsourcing. However, this time-consuming process sacrifices precious time and opportunity cost, and the value of the insight diminishes the farther it is from the timing of the original postings. The benefit of social analytics is to leverage speed to insight to gain real-time insights, allowing for analysis and reaction in a timely fashion.

This white paper details the requirements necessary for an optimal SRM solution that will provide organizations with real-time actionable insights from social media through both base and advanced analytical functions.

Social Media

No one questions the exponential growth of social media or that this growth is likely to continue and that its impact will be felt more deeply and broadly. Currently, the struggle persists with how to gain insight from this tremendous amount of data and furthermore, how to leverage it.

It's not enough for businesses to just eavesdrop on or participate in the conversations taking place within social media Websites. Organizations must capture and distill these conversations into actionable insights. One of the biggest challenges is to do this in real time before the conversations and the resulting insights lack relevance in the quickly changing social media space. Once this problem is solved, the next big challenge is how to convey these actionable insights in a fashion that permeates the entire enterprise, so that all parties are working off the same intelligence and a complete and consistent set of information.

Currently, many organizations manage their customer information and knowledge through sophisticated CRM applications. A natural extension of these tools is to incorporate their customers' social behavior or social footprint through SRM.

Social Relationship Management

Understanding the causation, correlation, and implications of the conversations occurring in social media will play a critical part in overall marketing, branding, sales, business intelligence, customer service, consumer loyalty measurement/management, predictive analysis, and market research. This comprehensive approach includes enterprises using social media in the following three steps:

- **Listen.** Listen to consumers' online conversations and analyze them to gain insights into their behaviors, attitudes, causation, and correlation.
- **Engage.** Talk with select consumers by engaging directly with managed workflows or via ongoing consumer communities in order to better develop messaging and brand equity pillars, identify and fix key customer satisfaction issues, and improve product features and attributes.
- **Market.** Create integrated marketing programs to participate in ongoing, meaningful and authentic dialogues with consumers through efforts such as outreach programs, targeted media buys, word-of-mouth campaigns, and highly satisfactory digital experiences across multiple platforms.

To create an industry-leading SRM solution for the enterprise, best-of-breed software components need to be integrated to support the blend of analytics and workflow management and deliver a turnkey enterprise platform.

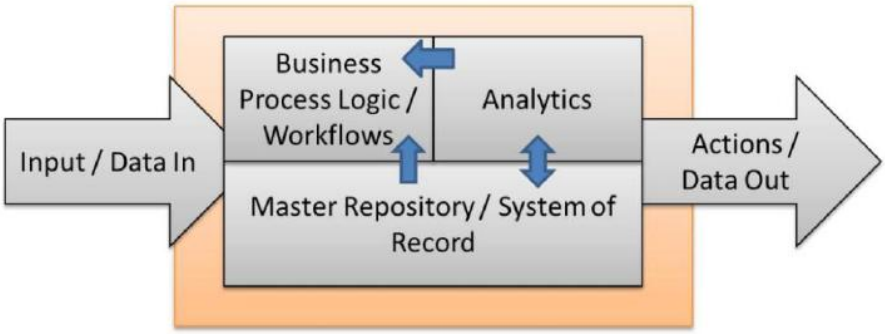


Figure 1. Social relationship management solutions need to integrate several software components to support the blend of analytics and workflow management. [1]

Regardless of the approach, the software components to be integrated include the following:

- Social media monitoring, measurement, and analytics
- Integrated customer view
- Community platform
- Engagement platform

Social Media Monitoring, Measurement, and Analytics

This component includes real-time content categorization, alerts, awareness, consideration and preference metrics, blended qualitative and quantitative analytics, causation and correlation, access to historical data, multidimensional analysis, and demo/psychographic analysis.

The technological foundation of social media monitoring, measurement, and analytics should be rooted in a fully robust text analytics engine that can support the inherently *unstructured* nature of social media data.

Text-based data processing should include the unstructured world of social media data as well as *semistructured* data typically found within the enterprise, including but not limited to CRM data from call centers, e-mail transcripts, iChat, private communities, and internal documents for automated interpretation. The best results will ultimately come from the combination of customer inputs from both external and internal sources.

[1] Crowd Factory.

Integrated Customer View

Integrated customer view is the ability to combine text-based data and metrics with other forms of data and metrics (such as Web analytics, digital analytics, and sales analytics) in a unified dashboard that can be customized on a client or user basis. This integrated customer view enables the creation of dashboards, charts, and reports from various data sets, and the ability to conduct correlation and causality analysis for "power" analytics users.

The integrated customer view can leverage more-powerful business intelligence software, which provides the following:

- A unified data warehouse (this can include all forms of structured and unstructured data)
- Query-based data extraction
- Additional modeling and statistical analysis across discrete data sets
- Dashboard graphing and reporting

This software component can become a hub for integrating analytics into a singular platform.

Community Platform

A community platform is software to host and conduct both private and public communities on behalf of large consumer segments and audiences in aggregate for syndicated insights or use by the enterprise as a primary research tool. These communities can be dedicated environments for enterprises, including both customer loyalty and ongoing consumer relationships, or be leased from preexisting communities on demand.

Engagement Platform

An engagement platform is software that enables users to efficiently compose, respond, and measure their social media interactions.

- Compose:
  - Send messages, links, pictures or videos to multiple social networks in one easy step.
  - Post to Facebook, Flickr, Twitter, YouTube, and other popular social networks individually or simultaneously (you can choose the destination per post).
  - Shorten links automatically and make them trackable.
  - Schedule posts for anytime in the future with an appropriate calendar tool.
- Respond (two-way communication):
  - See responses to your posts on all social networks in one spot, without having to toggle between screens or panes.
  - Respond to anyone who shows up in your incoming messages, timeline, or keyword searches with just one click.

- Retweet with one click, using Twitter's retweet method.
- Flag messages for follow-up.
- Tag messages as positive/negative for easy sorting later.

- Measure:
  - Track the number of fans and followers, retweets, mentions, click throughs, and more.
  - Learn which messages and tactics resonate with your audience.
  - Track how many Twitter lists you are featured on.
  - Measure your reach—the aggregate number of people who have the potential to see your message based on the number of followers of the people who retweeted it.
  - View past messages in a simple, chronological format.

The engagement platform can leverage more-powerful workflow/business process management software. This software should encompass a robust and flexible engine that can handle multiple, discrete role/responsibilities for various users, rule-based decision-making, work task routing, and easily configurable managed processes. This engine is critical in managing tasks such as social media outreach/engagement efforts, customer satisfaction workflow follow-up, and social media campaigns.

An Optimal Listening Platform

While listening or collecting the millions of conversations that occur daily is a critical function, it is not sufficient to gain true insights into your customers. In order to gain truly actionable insights and real knowledge, you need to analyze the data.

Even though all social media conversations are unstructured, the optimal analytical solution must be able to incorporate and analyze internal enterprise data, often referred to as *semistructured* data, so that internal conversations such as support calls and call center logs can be included in the overall analysis. This approach provides for a more comprehensive assessment of consumers' behaviors, attitudes, and perceptions regarding their lifestyles, your category, brand, product, or campaign. It enables you to conduct more-advanced analytics looking for correlation and causality as it pertains to shifts in consumer trends. A complete and robust social media analytics solution includes a blend of qualitative and quantitative analysis based on millions of conversations collected annually, as well as a robust historical archive. When evaluating social media analytics solutions, it is recommended that you understand each solution's ability to function across the following three essential process steps:



Figure 2. Social media analytics solutions need to function across three process steps.

The optimal social media analytics solution will have both the base functions of data refinement and more-advanced analytical functions of data associations.

Data Refinement

Data refinement is required to structure and clean the data for more-in-depth analysis, focusing only on conversations that are relevant.

TABLE 1. DATA REFINEMENT

TERM	DEFINITION
Cleaning	Designed to eliminate invalid, duplicate, or incomprehensible content. These automated processes include splog (blog spam) removal through URL blacklisting and readability scoring.
Data extraction	Identifies and extracts core attributes from all conversations to enable baseline trending and analysis, including buzz activity, themes, authors, day-part analysis, gender, generation (age), geography (country, state, city, zip), consumer affinities, and associations on topics.

Data Associations

Data associations enable deeper analysis, often involving a combination of advanced sentiment definition, semantic analysis, topic creation, and influencer identification, augmenting core data sets with derived values and attribute correlations.

A key inherent feature of any social media analytics solution is that it does not restrict or unnecessarily limit your accessibility to the data. In fact, a solution should provide key themes by highlighting where large clusters of relevant conversations are occurring. Theme analysis is an open-ended, white space discovery that identifies and classifies the clusters of conversations that organically emerge from natural consumer interaction. Additionally, a social media analytics solution platform should be able to "understand" when a posting is referring to multiple topics and then break down these topics into subsets of postings, or *snippets*. These snippets will enable the user to more accurately capture advanced consumer sentiment across any topic, theme, dimension, or term.

TABLE 2. DATA ASSOCIATIONS

TERM	DEFINITION
Theme	Theme analytics identify semantically similar content groups by extracting true contextual meaning from within and across similar conversations. Theme analytics surface meaningful insights for each content group by further analyzing and scoring the surrounding text most commonly associated with each theme. Theme analytics detail the following characteristics of the posts: • **Frequency:** Total volume of posts related to the theme. Indicative of interest level and breadth of the theme. • **Density:** The level of focus or concentration of posts. Illustrates the extent to which there are shared or disparate views on the theme. • **Relevance:** The degree to which a theme is associated with the original topic. Guides evaluation of which themes represent new versus existing thinking.
Sentiment definition	Derived using a natural language–based algorithm to identify the tone of posts. This analysis extracts the grammatical usage of each term to verify meaning and context.
Semantic analysis	Working in real time and processing at speeds that keep pace with social media content creation, semantic analysis enables you to extract precise contextual meaning from consumer conversations by systematically analyzing the language used to describe a topic. Selects conversations based on their meaning and not just the occurrence of specific terms.
Topic creation	A combined semantic and keyword technique to achieve a high degree of accuracy, minimizing the occurrence of false positives and false negatives.
Influencer identification	A deep profile on content authors that enables you to rate degrees of influence against specific topics over time. Trendsetting activists and detractors.

Actionable Insights

An imperative capability in an advanced social media analytics solution is the ability for the user to customize attributes or dimensions that will filter the underlying data set. *Dimensions* can be defined as a context within which, for example, a brand, product, company, TV show, or any other topic of interest is being perceived by social media. Dimensions include such items as perception, innovation, price, intent, customer service, and "awesomeness."

While it may be interesting to listen to and analyze social media conversations, the ultimate goal is always to create actionable insights that can drive areas such as marketing, public relations, and overall business objectives.

Just a few of the actionable insights that an advanced social media analytics solution can provide are detailed in the following table.

TABLE 3. ACTIONABLE INSIGHTS

TERM	DEFINITION
Sentiment	Automatically detect the writer's opinions.
Emotional and rational adoption associations	Love, like, favorite, hate, health.
Trending	Ability to identify growing or shrinking trends in time by identifying related themes in time.
White space analysis	Identifying opportunities for underlying topic of interest in regard to a product or brand. An example would be white space analysis to identify the ways that people are using a brand's products of which the brand is unaware, allowing the brand to create new marketing campaigns and publicize these new uses.
Brand characteristics	Taste, features, quality, and so on.
Consumption metrics	Intent to watch, buy, loyalty, ritual connections.
Consumer associations	Economic, quality, selection, trust, authenticity, and so on.
Influencer identification	A deep profile on content authors that enables you to rate degrees of influence against specific topics over time. Trendsetting activists and detractors.
Projection	Customer will be able to project a trend or an insight discovered to a larger population (Twitter, Facebook, blogs, and so forth). In this case, the customer can identify what portion of the overall population is affiliated with this discovered trend or insight.
Prediction	Using historical data, ability to predict with a certain margin of error and certitude what will occur. Some examples include theme trending and activity timeline.

An Optimal Listening Solution

The data refinement and data association functions described above can give the impression that the optimal listening platform involves a slow and laborious process. This could not be further from the truth, as the optimal listening solution is automated and provides real-time insight. Yes, it is feasible to gain insight from the millions of daily conversations manually or in a semiautomated method. However, as stated previously, this is a time-consuming process, and the value of the insight diminishes the farther it is from the original time of posting. The true benefit of social analytics is *speed to insight*, where you can gain real-time insight, allowing for analysis and proactive response in a timely fashion. A company can gain insight through a variety of methods, but to obtain this insight in real time and with the best value for the dollar, a Web-based (software as a service, or SaaS), automated application is required, as illustrated below.

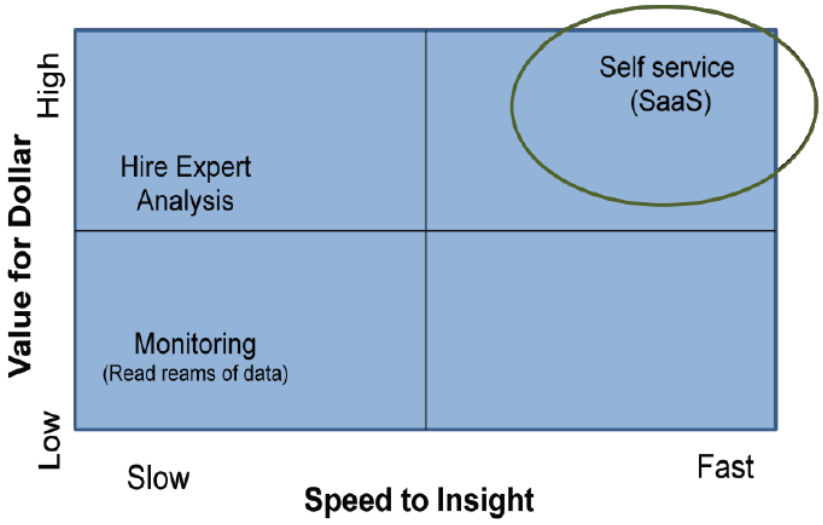


Figure 3. A SaaS application is the listening solution that provides the best value for real-time insights.

Listening Technology

Many listening systems use basic keywords or Boolean term expressions to define which content should be grouped under a specific topic. These technologies require exactness in word search choice and specific knowledge of the information sought after. Search topics and terms need to be preidentified and applied against large volumes of data. This results in a scenario where expressions quickly become unmanageable as negative terms are added in an attempt to exclude references to unwanted content. An additional downside to this approach is the length of time it takes to process a subset of relevant data, as well as an inability to accurately categorize content.

At the opposite end of the spectrum, some categorization systems use linguistics-rules-based natural-language processing (NLP) techniques in a further attempt to disambiguate content. These techniques can be costly, in terms of the time it takes to both develop the complex models involved and process each textual item. Moreover, this approach requires additional linguistics rule sets anytime the context of conversation shifts, making it difficult to apply to extremely unstructured textual data sets such as social media.

Semantic filtering techniques based on statistical language modeling are revolutionizing social media market research. This approach deciphers the relationships and correlations between words and plots where they dimensionally reside in proximity to a specific topic of interest. This technique extracts specialized language features from a large data set and selects conversations based on their meaning. By isolating the contextual meaning of a topic, semantic filtering minimizes miscategorizations (false positives) and inappropriate rejections (false negatives) that can otherwise occur when using other available techniques and technologies. The resulting data is more relevant and pertinent to a research query. Latent semantic analysis (LSA), for example, is an advanced form of this statistical language modeling.

Latent Semantic Analysis

Conducted by analyzing word usage (specifically, word co-occurrence) within a set of documents, LSA is a method for exposing latent contextual-meaning within a large body of text. Words which appear in similar contexts are assumed to have similar meaning or relational significance. This approach allows more-relevant terms to carry more weight and thus result in more-accurate analysis of what and how consumers are talking about around areas such as a category, brand, or product.

Identified words and conversations are then analyzed and reduced using singular value decomposition (SVD), a method of statistical transformation. SVD identifies relevant correlations between specific combinations of terms and documents. A comparison of search technologies demonstrates the volume of invalid data received when relying on keyword or Boolean search, as compared to semantic filtering.

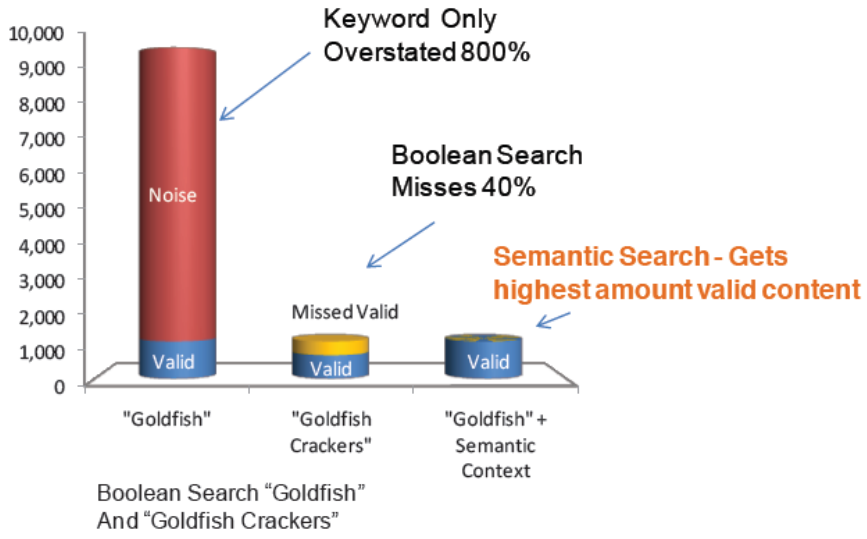


Figure 4. A comparison of search technologies demonstrates the volume of invalid data received when relying on keyword or Boolean search, as compared to semantic filtering.

As you would imagine the technology selected to base the listening platform will have a direct impact on the speed to insight and the value for dollar you obtain from a specific platform.

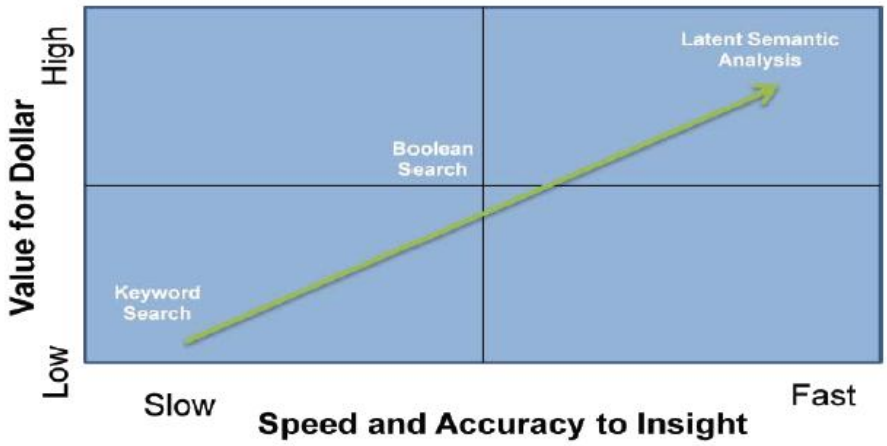


Figure 5. This chart illustrates the relationships between the technologies chosen and the value realized.

For enterprise clients and partners embarking on SRM, and trying to decide on the most appropriate social media measurement and analytical solution to meet their needs, it becomes a balance of cost versus automation versus speed to insight.

- For "crawling-to-walking": If cost is your biggest driver, and you can live with manual reading/analyzing content and delays to insight, use keyword/Boolean based tools.
- For "walking-to-running": If you want social media to be a key corporate asset and competitive differentiator and the power of automated analytics to drive more-meaningful action, choose a more sophisticated technology:
  - Semantic analytics: Choose LSA if speed to insights is important (real time).
  - Semantic analytics: Choose NLP if you can accept time lags (weeks or months) for insights.

Conclusion

To fully realize the benefits of social relationship management, organizations need a solution that both collects and analyzes the data gathered from social media. The optimal social media analytics solution will have both the data refinement and data association functions necessary to generate real-time actionable insights. When choosing a social media analytics solution, organizations must also balance cost, automation, and speed to insight in order to select the most-appropriate listening technology.

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Hardware and Software, Engineered to Work Together