The popularity of social networking sites, coupled with our 24/7, always-on mobile devices, means that data and opinions are always ‘flowing.’

— Matt Ganis and Avinash Kohirkar, Guest Editors

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About Cutter IT Journal

Part of Cutter Consortium’s mission is to foster debate and dialogue on the business technology issues challenging enterprises today, helping organizations leverage IT for competitive advantage and business success. Cutter’s philosophy is that most of the issues that managers face are complex enough to merit examination that goes beyond simple pronouncements. Founded in 1987 as American Programmer by Ed Yourdon, Cutter IT Journal is one of Cutter’s key venues for debate.

The monthly Cutter IT Journal and its companion Cutter IT Advisor offer a variety of perspectives on the issues you’re dealing with today. Armed with opinion, data, and advice, you’ll be able to make the best decisions, employ the best practices, and choose the right strategies for your organization.

Unlike academic journals, Cutter IT Journal doesn’t water down or delay its coverage of timely issues with lengthy peer reviews. Each month, our expert Guest Editor delivers articles by internationally known IT practitioners that include case studies, research findings, and experience-based opinion on the IT topics enterprises face today — not issues you were dealing with six months ago, or those that are so esoteric you might not ever need to learn from others’ experiences. No other journal brings together so many cutting-edge thinkers or lets them speak so bluntly.

Cutter IT Journal subscribers consider the Journal a “consultancy in print” and liken each month’s issue to the impassioned debates they participate in at the end of a day at a conference.

Every facet of IT — application integration, security, portfolio management, and testing, to name a few — plays a role in the success or failure of your organization’s IT efforts. Only Cutter IT Journal and Cutter IT Advisor deliver a comprehensive treatment of these critical issues and help you make informed decisions about the strategies that can improve IT’s performance.

Cutter IT Journal is unique in that it is written by IT professionals — people like you who face the same challenges and are under the same pressures to get the job done. Cutter IT Journal brings you frank, honest accounts of what works, what doesn’t, and why.

Put your IT concerns in a business context. Discover the best ways to pitch new ideas to executive management. Ensure the success of your IT organization in an economy that faces the same challenges and is under the same pressures to get the job done. Cutter IT Journal brings you frank, honest accounts of what works, what doesn’t, and why.

Cutter IT Journal is published 12 times a year by Cutter Information LLC, 37 Broadway, Suite 1, Arlington, MA 02474-5552, USA (Tel: +1 781 648 8700; Fax: +1 781 648 8707; Email: citjeditorial@cutter.com; Website: www.cutter.com; Twitter: @cuttertweets; Facebook: Cutter Consortium). Print ISSN: 1522-7383; online/electronic ISSN: 1554-5946.

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Over the past five years, the use of social media has grown at a staggering rate. As a result of this profound movement, social media venues such as Twitter, Facebook, and Google+ are being widely leveraged by large multinational organizations in an effort to reach out to larger audiences around the world. In the October 2013 issue of *Cutter IT Journal*, we explored the question “What is the value of social media analytics?” Now, in this issue, we take a closer look at this growing phenomenon of social media by exploring the perception, the power, and the promise of social media analytics.

According to reports, while the worldwide growth rate of social media adoption is slowing, it is still predicted that the total population of users within the various social media venues will top the 2 billion mark by 2016. Note that this year alone, it is estimated that over 1.6 billion people will log into social networking sites. That represents a 14.2% growth of adopters from 2012. This double-digit growth rate is expected to continue well into 2017, where current trends show that over 2.3 billion people will be participating in some kind of social media activity. Much of that growth is expected to come from less developed markets such as India, Indonesia, and Mexico.

As a comparison, consider that over 108 million Americans watched the Baltimore Ravens beat the San Francisco 49ers 34-31 in Super Bowl XLVII. While that NFL championship game broke numerous records on its way to becoming the most-watched television show in US history, social media discussions represent a brand of marketing that can reach (if not easily surpass) those Super Bowl-sized audiences on any day or at any time of the year. As a result, marketers have seen the rise of social media as a promising channel for their activities. According to the Dachis Group, social media has a characteristic that is not seen in traditional marketing channels, namely, “scale.” Discussions are not just a one-time event; depending on how viral a topic becomes, the “campaign” could last weeks (if not months). The popularity of these social networking sites, coupled with our 24/7, always-on mobile devices, means that data and opinions are always “flowing.”

Stories of researchers combing through thousands of microblogging messages for insights and opinions about a variety of consumer goods abound in the literature. In one example, researchers from the University of Wolverhampton in the UK have analyzed hundreds of thousands of such messages across the Internet. Their results indicate that the use of these microblogging services (such as Twitter) can play a key role in supporting and enhancing important business processes.

Through social media interaction, companies are able to find everyday consumers who show unusually high interest in a particular product or brand. These individuals have a certain level of influence based on their popularity and reach. In this case, “reach” is defined as how often a tweet is referenced by someone. If an individual is deemed to have a high degree of influence, he or she is likely to be much more credible than simple mass advertising. By identifying these influencers and embracing them, a mutually beneficial relationship is formed; the company receives credible advertising through the influencer, and the influencer is able to strengthen his or her influence with help from the brand. It’s a win-win situation.

But what is the organizational perception of social media analytics? Are organizations actually deriving value from an in-depth analysis of social media? We begin this issue with an article by Cutter Senior Consultant Curt Hall, which leverages a survey conducted by the Cutter Consortium to understand the status and level of adoption of social media analytics across a number of enterprises worldwide. In performing the survey, Cutter used companies of various sizes (less than US $1 million to $50 billion) and from various geographies to ensure a broad sample. According to the survey, many companies are still unsure of the value of social media analytics, with a large percentage of organizations either opting not to analyze this data or indicating that they simply don’t know if they will at this
time. In this eye-opening report, Hall points to major obstacles that these survey participants view as barriers to entry. Issues range from the lack of both best practices and skilled personnel to concerns about privacy and the actual utilization of the results obtained through social media analysis.

As author Philip K. Dick once said, “Reality is that which, when you stop believing in it, doesn’t go away.” With that in mind, we move on to a fascinating article by Garrett Hall and Kevin Winterfield, which explores the power of social media analysis and insights. In the article, the authors provide an approach for extracting value out of social media by treating it as a new channel of communication between businesses and their stakeholders. They begin by describing a situation that grew organically (i.e., without the benefit of strategy or forethought) within their organization. Using the results of this haphazard approach as a baseline, they then laid out a strategy and a detailed metrics-driven approach to analyzing social content. According to Hall and Winterfield, “We believed we would drive better results by engaging with experts and influencers and telling our story through them instead of broadcasting marketing messages from behind branded social channels.” 

The new approach places influencers at the center of the universe and utilizes branded accounts to disseminate their messages. “The success of this strategy,” the authors note, “lies in giving our subject matter experts stronger and more effective voices in digital venues.” The authors demonstrate a very rigorous application of a measurement framework for collecting data at each stage to inform the execution of the strategy. This use case helps bring a sense of reality to the possibility of leveraging this new world of social media analytics.

We follow this up with an article from Viktor Arvidsson and Jonny Holmström that emphasizes a strategic approach to extracting optimal value from social media analysis. The authors offer some interesting perspectives about the volume and velocity of social media data. They observe that where organizations previously struggled in their decision-making processes due to incomplete information, now they struggle with problems of filtering, selecting, and making sense of an overwhelming amount of information. In exploring these ideas, the authors examine a specific use case in which a Swedish city relied on social media to respond to a health crisis. In doing so, they identify three key aspects of a social media strategy that we believe should be considered by any organization looking to leverage social media:

1. Don’t respond to the environment; respond with it.
2. Don’t invest in social media technology; invest in organizational transformation.
3. Social media necessitates rethinking organizational boundaries.

In this thoughtful case study, the authors explain how each one of these aspects can be critical in realizing optimal value from social media investments.

Next we consider the promise of uncovering interesting insights or observations from all of this social media content. Can we really discover new and interesting pieces of information? In their article, Brenda Eschenbrenner and Fiona Fui-Hoon Nah ask a question that is directly related to the theme of this month’s journal: “What business objectives are being most aggressively pursued using social media?” To answer it, they report on an extensive analysis of the use of Facebook by the Big 4 accounting firms. The authors used a number of categories to analyze the information presented in Facebook “fan” and “career” pages, specifically analyzing them for a number of topics relating to (among other things) recruitment, knowledge sharing, and organizational culture/change. One of the interesting findings from their analysis was that most of the recruiting on these Facebook pages happens indirectly through socialization efforts as opposed to directly recruitment-related activities (posting résumés, scheduling interviews, etc.). The lesson here: sometimes what we expect to find in various social media outlets isn’t what we get. Their explanation for this phenomenon is that Facebook is not currently considered an appropriate platform for
activities related to recruitment (even though there are pages explicitly dedicated to that endeavor). It’s an interesting reality check for those of us looking to analyze the large amounts of content within Facebook. Finally, they conclude with some “words of caution” that management should consider as they formulate their organization’s policy on the use of social media.

We wrap up this issue with an article that emphasizes the role of strategy in an organization’s social media-related investments. This is a critical point. If we believe that the large population participating in social media discussions can provide us with new and relevant insights, we need to ensure that our investments in uncovering those insights aren’t throwing good money after bad. In their article, Akshay Mathur, Jagdish Bhandarkar, and Shanmugam Periasamy extol the virtues of a strong strategy and present a unique process framework with some thoughts on its implementation. One of the central themes in this article is the exploration of various approaches to measuring the ROI of a social media strategy. This goes directly to our question of how to measure the value of social media analytics.

Clearly there are tremendous possibilities for insights and revelations within the sheer volume of data generated by billions of people worldwide. In this issue we explore — and, we believe, answer — the question “How do we measure the value of social media insights?” At one end of the spectrum we can simply understand how much people are talking about a particular product or service. And there is value in knowing that. At the other extreme, we see organizations analyzing this data to uncover entirely new and promising business models. The next step is yours — what new and insightful information will social media analysis reveal about your organization?

ENDNOTES

2 Bennett (see 1).

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Social Media Data Analysis: Current Status, Major Obstacles, and Future Directions

by Curt Hall, Senior Consultant, Cutter Consortium

From July to September 2013, Cutter Consortium conducted a survey that asked 39 end-user organizations (based worldwide) about various issues pertaining to business intelligence (BI), data warehousing, analytics, and Big Data practices. This included the use of “new” analytic data sources like social media, sensors, and mobile devices and the adoption of cutting-edge technologies like Hadoop, massively parallel/high-performance analytic databases, data virtualization architectures, NoSQL databases, and streaming-analytics systems.

We asked one set of questions that focused on corporate attitudes and trends with regard to tracking and analyzing data from social media sites like Facebook, Twitter, Google+, and others to assist with BI, PR, marketing, product development, and other corporate data analysis and performance management initiatives. The goal was to identify trends that you can use to gauge your own organization’s efforts at monitoring and analyzing social media data.

This article considers survey findings about:

- The extent to which organizations are currently analyzing, or planning to analyze, data from social media sites to support their BI and other data analysis efforts
- The major obstacles standing in the way of organizations seeking to analyze social media data

SURVEY METHODS

In examining social media data analysis trends, I’ve focused specifically on end-user organizations, filtering out survey responses from vendors and consulting firms that sell social analysis, BI, data warehousing, analytics, and other data management and analysis products or those that assist organizations with their implementation. I’ve done so because vendors and services firms, in assisting clients, tend to apply new technologies to a greater extent than end-user companies do, and this can possibly skew survey results, making it appear that more end-user organizations are utilizing new technologies than may actually be the case.

Our survey has a decided corporate computing focus, with a majority of the respondents having indicated that they come from IS/IT management, software engineering and programming, marketing and sales, product R&D, and other corporate backgrounds. This was the intention, as the aim was to focus on how traditional organizations and enterprises — as opposed to Internet-focused companies such as Google, Facebook, Twitter, and the like — are utilizing social media data.

As noted above, the findings discussed here are based on the answers of 39 end-user organizations of various sizes worldwide. Figure 1 shows the regions in which respondents’ organizations are headquartered. Figure 2 shows the spread of respondent organizations’ approximate annual revenues (in US dollars). This information is included to show that our findings are based on a sample of organizations headquartered in various geographic regions and consisting of a broad range of small, medium, and large companies with...
yearly revenues ranging from under US $1 million to over US $50 billion.

**STATUS OF CORPORATE SOCIAL MEDIA ANALYSIS**

Figure 3 shows how participants responded when asked if their organizations currently analyze, or plan to analyze, data from social media sites to support their BI, CRM, and other data analysis efforts. Approximately 21% of organizations say they currently analyze social media data for these purposes.

Our latest findings also indicate that organizations’ plans for analyzing social media data within the near future are fairly strong. The same can be said about organizations indicating that they are “seriously investigating” the possibility. Combined, these two groups account for approximately 30% of those surveyed.

It is apparent, however, that not everyone has been convinced of the necessity or importance of analyzing social media data. Of those surveyed, 38% say they have no plans to analyze social media data in the foreseeable future, and another 11% say they simply “don’t know” at this time.

![Percentage of respondents](image_url)

**Figure 2 — Respondent organizations by annual revenues (in US dollars).**

![Percentage of respondents](image_url)

**Figure 3 — Is your organization currently analyzing, or planning to analyze, data from social media sites to support its BI, CRM, marketing, and other data analysis efforts?**
The bottom line is that, even with all the hype surrounding the value of social media for the enterprise (in general) and social media analysis (in particular), the actual practice of analyzing social media data by end-user organizations — as opposed to Internet-focused companies — is currently somewhat limited (i.e., approximately 20%).

SO WHAT’S HOLDING THEM UP?

Figure 4 ranks the major obstacles and issues survey participants saw as standing in the way of their organizations’ plans for analyzing social media data. Let’s consider each in turn.

Lack of Best Practices and Methodologies for Social Media Data Analysis

Social media analysis is still a fairly new application for many end-user organizations. Consequently, many are looking for guidance and best practices when it comes to actually designing and planning their social media analytics programs. Social media analysis requires an infrastructure for storing, processing, and analyzing unstructured and complex data and for integrating the findings into an organization’s other data analysis and business processes. Many organizations simply are not experienced with analyzing unstructured data (although, according to findings from this same survey, approximately 26% of organizations indicate they now manage and analyze unstructured data in some form or another).

Based on our survey findings as well as discussions and interviews with various clients, it’s apparent that a lot of organizations are simply unsure of the types of questions they need to be asking from their unstructured data. In addition, it also appears that, for many organizations, there is a gap or lack of understanding separating the monitoring and analysis of social media information and the application of the findings in order to achieve some business value or benefit (i.e., how do we integrate findings into our business processes?).

Difficulties Determining How to Obtain Business Value from Social Media Analysis

Most business leaders will tell you they understand that monitoring social media is important for gauging brand visibility and consumer sentiment toward their company’s products and services. But beyond this fairly
basic application of social media “listening,” many are unsure as to how to actually go about utilizing social media analysis for more comprehensive or advanced applications — for example, to assist in determining which brands or product models to discontinue, to support product research and development, to build richer models for cross-channel marketing, and so forth.

Lack of Personnel Skilled in Social Media Analysis

Many end-user organizations simply do not have staff readily on hand who possess a strong understanding of social media analysis tools and techniques. Depending on their sophistication, such tools can include complex algorithms, natural language processing (NLP), and other linguistic analysis techniques derived from AI and advanced statistics. Furthermore, the conversational nature of social media content makes it difficult to analyze. Not only is the content largely unstructured, it also typically employs a lot of slang, jargon, industry terminology, and idiomatic expressions. In addition, social media postings frequently contain emotional undertones that can express sarcasm, disappointment, excitement, skepticism, and so on, depending on the context — sometimes subtly, and sometimes not so subtly. Discerning the value of social media trends and analyses and applying them in the context of a business scenario can therefore be quite a challenge. Uncertainty about social media analytics naturally tends to make some business people leery of the accuracy of the findings as well. As a result of these issues and others, specialists who possess knowledge and experience in applying social media analysis (in conjunction with other BI and analytic processes) for particular domains and industries tend to command high compensation.

Challenges in Sourcing and Integrating Social Media Data

For organizations to capture, analyze, and/or integrate data using the traditional data warehousing and BI tools they are comfortable with, or to integrate it with existing business processes such as customer service or claims processing, that data must be in a “machine-readable” format. Unstructured social media data is, to say the least, in less than a machine-readable state. Achieving optimum value from social media analysis can often require companies to combine findings from social analyses with their other BI and analytics findings (customer, marketing, consumer research, demographic/location, usage data, etc.) — in other words, to integrate multiple data sources or analysis results. As an example, automobile manufacturers are taking findings from the sensors deployed in their hybrid vehicles — such as those used for measuring charging patterns, mileage, and other usage trends — and combining them with social media analyses. Such comprehensive analyses provide more specific intelligence and customer feedback, which enables the manufacturers to derive deeper insight into how customers are using their vehicles in certain instances and to contextualize feedback on features and functions of different vehicle models. Social media is great for gathering rich customer/user feedback because consumers tend to elaborate when discussing products and services on social media networks and company websites.

Ford reportedly used such a comprehensive analysis in an attempt to determine how customers felt about the “three-blink” option for its turn indicator (i.e., the turn signal would automatically disengage after the driver makes a lane change), a feature available on certain vehicles. But what Ford found out was unexpected: people weren’t discussing the blinking capabilities of various vehicles, but rather that the turn signal devices were located either too low in some vehicles or in the wrong place altogether in others.1 By integrating social media data into its analysis, the automaker was able to discover its customers’ true needs.

Help from Hadoop and Others

Although sourcing/integrating data acquired from social media sites remains an issue for end-user organizations’ social media analysis efforts, the problem is becoming much less of a headache than it was just a few years ago. For one thing, traditional data integration and BI vendors now offer specific gateways or connectors designed to allow their tools to transform unstructured and semistructured data into structures suitable for enterprise applications, including relational data warehouses and CRM, marketing, service, and other enterprise applications. Also, the social media networks themselves have made it easier for vendors and solution providers to integrate their social marketing, analysis, and response applications with their respective social platforms by offering APIs and other integration facilities (e.g., for providing access to Twitter and Facebook feeds) as well as by entering into partnerships with data integration and BI solution providers.

We are also seeing the introduction of new tools designed for unstructured/semistructured data handling. One of the most important is Hadoop. Most of the analytic database vendors have added capabilities to allow data warehouses built with their offerings to take advantage of Hadoop’s unstructured data processing functionality, as have many BI vendors. Although current use of Hadoop among end-user organizations is
still fairly limited, it is expected to grow as the technology matures and becomes better understood.

The reason organizations are so interested in Hadoop for performing social media analysis is because it can store and process huge amounts of unstructured data practically and cost-effectively, making it possible for organizations to perform analyses multiple times in order to measure changing consumer or public opinion over time (e.g., comparing several months’ or years’ worth of findings). In addition, Hadoop can be used to analyze very large or complete data sets, as opposed to samples or summaries. This is important, because for some applications — including social media/sentiment analysis, sensor data analysis, and so on — sampling might miss infrequently occurring but possibly important patterns.

Finally, entirely new products and services designed specifically to make it easier for end-user organizations to apply social media monitoring and analysis are starting to be introduced. These include industry-focused and domain-specific applications, such as newBrandAnalytics’ Social Guest Satisfaction application for the hospitality industry or Attensity’s text analytics solution for the retail banking industry.2,3 Also, many of the enterprise software leaders have developed or acquired social media analysis technology. Probably the leader in this area is cloud-based CRM provider Salesforce.com, which has taken a very aggressive approach to integrating social media technology — both for supporting enterprise collaboration as well as for analyzing consumer sentiment — into its Salesforce CRM applications. Both of these developments are of such importance that I believe in just a few years, social media/sentiment analysis capabilities will become simply another feature of CRM tools (i.e., “social CRM analytics”).

Consumer Privacy Concerns

Consumer privacy is a daunting issue, and it continues to receive increasing attention as organizations seek to formulate their social media monitoring, analysis, and analytics initiatives. At the recent Cutter Summit, addressing consumer/customer privacy in social media and analytics applications was a topic of numerous lively discussions.4 Specifically, how do you figure out — hopefully beforehand — which practices will be acceptable and which could cross the line when you monitor and analyze the social media posts of your customers or consumers in general? This is a tricky question for which there are no easy answers. In fact, even the expert players themselves (e.g., social media giants like Facebook) end up upsetting their users and suffering consumer backlash from time to time because they have underestimated — or not adequately considered — the attitudes of their users when it comes to analyzing, sharing, or utilizing their postings or profiles in some new way.

The bottom line is: beware! When it comes to social media monitoring and analysis, do not underestimate the possible “creepiness” factor whereby you risk turning off or upsetting your customers or consumers. One way around this is to inform them of your intent to capture and analyze their postings and your reasons for doing so. The difficulty lies in determining to what extent (i.e., in how much detail) you want to inform them.

CONCLUSION

Social media monitoring and analysis by end-user organizations is increasing, but it is still somewhat limited (at approximately 20% of those organizations surveyed). However, the research does indicate that interest among organizations in the possibility of analyzing social media data in the near future is fairly high. That said, organizations are still confronted by a number of issues and concerns that are hindering their social media analysis plans.

Regardless of these issues, I believe that social media analysis is poised to experience fairly strong growth among organizations over the next 12-16 months. Several trends point to this, including:

- **Social media usage by consumers and businesses is increasingly rapidly**, and social media is now the leading medium for publishing consumer content on the Web. Moreover, new social media sites are appearing constantly.

- **The growing popularity of social media offers considerable insights into such important indicators as consumer sentiment, product/brand preferences, market indicators, and economic stability** — all of which companies can use to influence consumer opinion and buying behavior.

- **Social marketing is growing.** Consequently, organizations should focus on linking their social marketing initiatives with their social CRM (e.g., tracking, monitoring, analysis, results integration/response) activities.
Vendors and cloud service providers are constantly introducing new social software and services. These include offerings to help end-user organizations integrate social media data into their BI and data warehousing systems, as well as tailored industry- and domain-specific applications designed specifically for social media monitoring and analysis. End-user organizations should look to using, whenever possible, cloud-based social media analysis services and/or industry/domain-specific applications and services. In addition to providing the usual benefits afforded by cloud/focused applications and services (usage-based licensing, no up-front costs, etc.), such offerings can help by supplying prebuilt analytics models and reports, which can reduce the need for personnel skilled in social media application development.

These developments make social media simply too important for organizations to ignore. By offering insights into such important indicators as consumer sentiment and product preferences, social media facilitates companies’ efforts to influence consumer opinion and purchasing behavior through their marketing, PR, support, product development, and HR practices.

The bottom line is that we can expect to see social media analysis experience fairly strong growth over the next 12-16 months. This will result in an increasing demand for software, services, and personnel that can analyze social media as well as interpret and apply the results to achieve some business goal or competitive advantage. Demand will come from commercial organizations seeking to capitalize on social media as a new advertising/marketing/transaction channel and as a source of rich data for blending with their other BI and analytics efforts (i.e., to create comprehensive analyses). Social media analysis will also be used by government organizations worldwide as they seek to influence their citizens, monitor social unrest, and track criminal and terrorist activities.

ENDNOTES

4 Cutter Consortium Summit, Boston, Massachusetts, USA, 4-6 November 2013 (www.cutter.com/summit/2013.html).

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Social media has opened new communication channels between businesses and their clients, prospects, influencers, and the general public. It enables conversations to move from an isolated, one-on-one environment (e.g., phone conversations, private email) into a more open environment, creating relationships between people who may never have otherwise connected. Moving the conversations into an open, social space provides tremendous opportunity for companies to engage key stakeholders and the public. Truly harnessing this opportunity requires a shift in thinking, new processes, and a foundation of data and measurements upon which to base actions.

**STRATEGY SHIFT: FROM QUANTITY TO QUALITY**

As we stepped into social media at IBM, we initially took a “let 100 flowers bloom” approach, encouraging broad experimentation and participation across the company. When each new person or team stepped out into the social space, new branded accounts on Twitter, Facebook, and so on would be launched and begin trying to be heard.

Through the initial months of trial and testing in the social space, it became clear that talking at our stakeholders through an ever-growing number of branded accounts would not yield the business results we wanted. We had a large number of IBM employees following a growing number of IBM accounts while mostly talking to each other. For those following us from outside the company, knowing which IBM account to follow for which information became confusing, while other IBM social media properties went silent as people within IBM switched jobs or stopped engaging. When the inevitable questions of measurement and success started to be asked, the answers were framed in the context of audience and followers: how many likes I have on Facebook or how many followers on Twitter. Those statistics did not really tell us if we were having an impact, and we struggled to demonstrate real business value.

With that realization, we shifted our focus from just trying to amass followers to focusing on developing a dialogue with people. We believed we would drive better results by engaging with experts and influencers and telling our story through them instead of broadcasting marketing messages from behind branded social channels. Thus far, our shift in strategy is working.

By focusing on engaging people, we are activating and growing our base of advocates and influencers, and they in turn are helping drive measurable business results. Our new approach puts influencers at the center of our social ecosystem and uses our branded accounts to support and amplify their message. The product developers, business partners, industry and technical consultants, and clients who use IBM solutions are the experts. They are the ones with the knowledge, guidance, and opinions that people trust and with whom people want to engage over the long term. The trusted experts are the ones who will be able to shape opinion and drive actions such as getting people to register for an IBM-hosted webcast, convincing someone that a solution white paper is worth reading, or speaking with credibility about the positive features and functions of a particular product. The key is identifying and connecting with the right influencers, helping them find their voice, and ultimately building relationships with others through social media. As we engage with the influencers, we use our IBM branded channels to amplify what they are saying and direct others to them as experts worth engaging.

The success of this strategy lies in giving our subject matter experts (SMEs) stronger and more effective voices in digital venues — all along using defined and consistent measurements to guide them forward. We call the methodology we developed to do this the IBM Select SME Program.
A UNIFIED MEASUREMENT FRAMEWORK LETS US MEASURE SUCCESS

The IBM Select SME Program was developed to improve outreach effectiveness, increase awareness and mindshare, and build a network of advocates for selected IBMers and branded social properties. An important part of this program is a unified measurement framework that measures two specific areas: favorable selling environment and social business program effectiveness (see Figure 1).

The favorable selling environment measurements examine market interest and mindshare by looking at metrics such as market volume (how many conversations are happening around a subject) and share of IBM voice (how much of the total conversation is about IBM).

The social business program effectiveness measurements ensure that a social strategy and marketing plan are in place and a social business manager has been identified to work with the SMEs and manage the branded social properties. It also defines four KPIs for measuring SMEs and branded social properties that allow us to determine the size of the audience our SMEs are reaching, the degree of engagement they are having with that audience, and the influence they have with that audience. The four KPIs are reach, engagement, amplification, and call to action (see Figure 2).

Reach is defined as the number of individuals who have opted into your communications. (Is your audience growing?) Measures of reach include connections, followers, visitors, and subscriptions. Engagement is defined as audience interactions with content published by the SME or branded social properties. (Is your audience interested in what you are saying?) Measures of engagement include views, likes, comments, and mentions. Amplification is defined as audience sharing of SME or branded channel content. (Is your message moving outside of your direct sphere of influence?) Measures of amplification include shares, inbound links, and retweets. Call to action is defined as targeted actions yielded from SME social accounts or blogs. (Do people trust you enough to follow your recommendations?) Measures of call to action include registrations for a conference or downloads of a white paper.

Measurement reports are run on a regular basis, and the measurements are reviewed during regular coaching meetings with the SMEs (see Figure 3). These reports allow us to coach and guide our SMEs along a path to improving their reach, engagement, amplification, and call to action. For example, our reports were showing that one of our SMEs was a very active blogger who...
was writing high-quality posts on a regular basis, but we noticed that this SME was underusing Twitter, an important channel for promoting blog content and driving engagement. After our coaching session with the SME, he began to utilize Twitter more, and we noticed a 37% increase in his key metrics.

By focusing on a select group of SMEs and influencers, we believe we will ultimately be able to reach a broader audience and be more effective in our communication. Integrating a data-driven approach to our social ecosystem strategy and execution enables us to better determine the outcomes of our actions and adjust as necessary.

DEVELOPING OUR DATA-DRIVEN SOCIAL ECOSYSTEM STRATEGY AND APPLYING THE MEASUREMENT FRAMEWORK TO IT

We conceptualize our social ecosystem strategy as a pyramid — one that has the mass market at the bottom, the key SMEs and champions (our most loyal advocates) at the top, and our less engaged influencers and communities in the middle (see Figure 4). The general idea is to focus our engagements and enablement resources at the top and then allow the communications to spread out to larger and larger audiences on their way down, measuring all the way. For example, we engage our SMEs and champions in education and dialogue around a given campaign or subject of interest to them and IBM, such as Social Business. We arm them to speak about a particular aspect of the topic (e.g., analytics), explaining IBM’s position and objectives and addressing any questions or potential issues along the way. As the experts, they engage with their followers through social media, and IBM helps amplify the message through our branded properties. Together we move the conversation down the pyramid and out to the broader audience.

One very important principle in our approach is thinking in terms of conversations, not one-off campaigns. We want to tell an evolving story and engage long term around it versus trying to establish short bursts of activity around a series of individual campaigns. With a campaign-based approach, there were large periods of downtime between “engagement” with our audience, and we spent energy in each campaign convincing many of the same people to tune back into what IBM had to say. With our storytelling approach, we aim to maintain an ongoing dialogue and keep people tuned in. We believe this will support a higher level of engagement over the long term and minimize the number of people we have to reengage or who tune out altogether.

To support this story mindset, we maintain an editorial calendar that sources our content pipeline and fills in the chapters of our story. As a new topic surfaces, we are able to schedule each into our calendar and put it into context with the other topics we are discussing and promoting. Through our measurement framework, we are able to determine which topics have more interest at a given point in time and adjust our IBM-generated content and provide guidance to experts accordingly. This

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Figure 4 — Social ecosystem pyramid.
helps us maintain a solid baseline audience (reach) and conversation (engagement). Knowing where our target audience is and that they are already following the conversation makes our calls to action much more effective.

**CASE STUDY: DRIVING REGISTRATIONS TO AN IMPORTANT ONLINE BROADCAST**

To better understand how we apply the strategy and measurement framework, we will look at a “chapter” in our IBM Social Business story about IBM’s Social Business Platform, a robust and comprehensive platform that businesses can use to transform themselves into social businesses.

**Spreading the News**

IBM hosted a key webcast to launch the platform in mid-March 2013, applied our social media “pyramid” model to it, and measured our results on a daily basis. By doing this, we were able to determine uptake in the message via our channels; our call to action metric was a click to the registration page for this event.

We derived the necessary social content from an overall messaging document and then briefed our SMEs, champions, and communities on the webcast and the key messages that would be discussed during the event. These influencers then took the information provided and incorporated it into their regular social media conversations and outreach. We used our IBM branded social properties to amplify their posts and to deliver our own messaging about the event. We worked with our internal communications team and the ibm.com website team to coordinate messaging and generate broad audience coverage.

We started the messaging a month before the online event with a plan to build on the Social Business Platform discussion we began during *IBM Connect*, our large annual in-person conference. We created and shared internal social media guidance sheets about the webcast to empower IBMers across the company to drive registration and attendance. The social media guides were reinforced with virtual worldwide team meetings to drive global engagement and bring a more global set of internal influencers and advocates into the conversation.

Our SMEs and champions posted about the webcast in their blogs and social channels in the days and weeks leading up to the event. Having an active base of highly knowledgeable and influential people discussing the event and related topics provided a wealth of content that we could use as the basis for promoting the webcast and engaging others through our branded social channels. We followed each of the influencers closely and retweeted, liked, and shared their content through our IBM branded social properties, making sure to direct people to register for the virtual event to hear more.

With this strategy, we delivered a high-frequency and focused set of messages via our Twitter account — with a message about the webcast going out nearly every hour around the clock — interspersed with regular news and retweets from key influencers. We tailored the messaging for our LinkedIn community and our Facebook account, delivering messages related to the event from these accounts about four times during each 24-hour period.

**Minding the Metrics**

We tracked our key measurements of reach, engagement, amplification, and call to action on a daily basis and fed back data, analysis, and guidance information from the metrics to the event coordinators. To help us track progress, we set up a single bitly.com URL to use in our outreach and monitored conversation volume and sentiment with social media analytics tools. With these tools in place, we matched our call to action numbers (click-throughs to the registration form) to registrations to see if we were not only driving people to the site, but also converting them into registrants once they arrived on the registration page. Throughout the promotion, we monitored the accounts and discussions for changes in sentiment and overmessaging to make sure we didn’t see a negative impact from our push and to get a sense of which aspects of the broadcast generated more interest, conversation, and positive sentiment.

By having this nearly real-time visibility into metrics and actions, we could see early on that both our messaging and the website were performing well, and we saw strong correlation between the call to action measurement and the registrations. We could also see that adding more detail and speaker information helped drive clicks and registration rates. It became clear that certain types of speakers drove more interest and traffic than others, and we have fed those learnings into planning for future events. Looking at the clicks on the bitly URL we created, we were able to watch as our outreach program grew and expanded globally.
Results

In just four weeks, we were able to drive significant registration and outstanding audience participation. We were unable to tie individual registrations directly to the referring source (e.g., did the registrant come from the bitly URL we used or a demand-generation email?), but we did see a strong correlation between the 2,111 total registrations for the broadcast and the traffic we generated through social channels. We drove 2,022 click-throughs to registration from 67 countries and were able to see daily registration counts rise in close correlation to the traffic we drove. Registrant quality proved to be high, too, with 1,102 live attendees. In all, this proved to be one of the top-performing online events in the webcast vendor’s history.

Figure 5 shows how the use of our total social ecosystem, using our pyramid model along with our social measurement framework, resulted in a very close correlation between click-throughs and registrations.

WHAT WE’VE LEARNED

Our approach is working. Taking this new tack, we have exceeded our registration and attendance targets for three separate launch webcasts in 2013, and we have increased registrations for content assets like the IBM Institute for Business Value study on Social Business. Each additional registration represents another potential sales opportunity that can be followed up on and nurtured. We have made significant progress implementing our engagement- and influencer-focused strategy. We successfully built SMEs into influencers and enabled already well-connected people to use those connections to drive action and results.

The execution of this strategy would not have been possible without the performance indicators and measurement infrastructure we have employed. Being able to identify the keywords, conversations, and other influencers around a given topic area has been critical in building our credibility with influencers and helping to coach them on how to have more impact in their own engagements. We are then able to monitor their success and help them measure the effect they are having on the business and on their own personal influence — driving traffic to pages, prompting downloads of key content, spurring event registrations, and increasing their followers and the frequency with which they are retweeted or otherwise engaged with by their audience through comments, likes, and so forth.

Equally important, we are able to demonstrate the potential of this model to positively impact IBM’s bottom line. We can show definitively that a key influencer can be a driver of quality traffic to our site and to key events and assets, and we can show that we are able to accelerate the engagement rate and influence of our experts. In one particular month, one of our experts was the sixth most successful “tactic” in driving leads for a particular IBM solution.

![Figure 5 — Measuring the impact of social media to drive action.](image_url)
We believe we are in the early stages of realizing the full potential of this engagement strategy. Part of getting there is growing the breadth and depth of our influencer community, a key to which is growing IBM’s ability to engage experts. At present, it is a model built on an investment in human capital and scarce resources, relying heavily on a limited number of experts within IBM who are skilled at making use of the data and coaching influencers. We anticipate that our more prolific influencers — at least within IBM — will begin to mentor and coach other influencers who are just beginning the journey. However, that requires putting the infrastructure and support in place to enable an influencer to mentor others.

Scaling this model at the rate and efficiency we would like requires that the data be easier to access and interpret so influencers can do more self-service and independent learning and ultimately mentor others. This requires better dashboards, broader understanding of the meaning of the data, and access to new data points like social network quality and quality of engagement.

In addition to growing the tooling and our ability to interpret the data, accelerating our results requires us to put the right set of motivations in place for our influencers and provide them with greater exposure. We recently began to explore using “IBM” events on social platforms to help raise the visibility of our influencers. Through things like hosted Tweet Chats and webcasts, we anticipate being able to lift the visibility of our influencers while also lending credibility to both the influencer and IBM. For example, building on a recent webcast about our Exceptional Digital Experience solutions, we joined with a third party to host a Tweet Chat after the webcast featuring our influencers in the digital experience and portal space. This extended the conversation and level of engagement beyond the webcast while raising the visibility of our influencers. It reinforced their position as experts and exposed them to a large audience. During that chat alone, we garnered 291 contributors, generated 1,320 tweets, and reached as many as 1.27 million people through the extended following of the participants. We do not yet know the long-term results of the chat, but in the weeks ahead we will be looking for a boost in the reach and engagement of the influencers we featured.

With the evidence we have to date, we are confident that our strategy of focusing on people and supporting it with a strong foundation of data is the right direction. As we push forward and test new tactics to grow the breadth and impact of our influencers, we fully anticipate encountering hits and misses along the way. Data is and will continue to be critical in determining what is working and what is not. It will help us fine-tune what we are doing, test new tactics like Tweet Chats, and demonstrate to the business that social media engagement done the right way is beneficial to the bottom line.

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The ability to effectively and efficiently interact with the business environment is key to organizational success. To this end, organizations increasingly use IT to enable new, improved flows of information both within and across organizational boundaries. Social media (SM) technologies hold great potential for enabling new forms of communication with distant actors. For this potential to be fully realized, however, investments in technology should be made alongside changes in organizational practice and design. While all IT strategies should complement high-level organizational goals and identify the organizational changes necessary to realize them, this is particularly the case with SM strategy, as it necessarily challenges traditional forms of organizing and blurs organizational boundaries.

We define SM strategy as the use of specific forms of IT to leverage distant knowledge in order to achieve organizational goals. The very notion of SM implies that SM strategy entails more than just facilitating high-level organizational goals; as it must make the organization more integrated with its environment, organizational redesign is always needed. In this article, we illustrate how capitalizing on the promises of SM may necessitate significant changes in how the organization relates with key external actors.

While SM technology can facilitate faster, more transparent, interactive flows of information when strategically used, it is certainly no silver bullet. With more ways than ever to capture information, organizations find themselves increasingly inundated with data. Thus the challenge for many managers has shifted from dealing with information shortage to dealing with information overload. To be efficient, organizations must successfully select, filter, and make sense of otherwise overwhelming information. Deliberate SM technology use can ease this managerial challenge, but mindlessly throwing SM technology into the mix will often do more harm than good.

In this article, we show how macrostrategic, transformational investments in SM technology allow organizations to effectively respond even during dramatic events. In particular, we outline and discuss three key strategic pillars that managers should take as guides when devising SM strategies:

1. Organizations should respond with their environment rather than to it. In SM, the organization is no longer master; it must partner with key actors in its environment. Managers should therefore view the business environment as integral to its response to a particular event, instead of as an external contingency to dominate and control. Only when organizations actively let the business environment shape organizational practice through their SM use are real benefits of SM technology likely to arise.

2. Organizations should not invest in SM technology but SM-driven change. Instead of digitizing cowpaths, managers should view SM as a strategic opportunity for IT-based organizational transformation. The managerial challenge is to look beyond traditional organizational structures — structures formed largely around a view of the external environment as a contingency to control — and see knowledge in the business environment as a force to channel through SM-driven organizational change.

3. Organizations should rethink organizational boundaries. As organizations become more integrated with their environment, organizational boundaries blur, and efficient organizational responses increasingly depend on external actors. Managers should therefore foster partnerships with the key actors within their business environment and put necessary transorganizational structures in place to facilitate efficient co-responses to external events. This again emphasizes the need for managers to view the environment as vital to their organizational practice, rather than as something that exists in opposition to it.
PILLARS IN PLAY: A CITY RESPONDS TO AN EPIDEMIC

Our formulations of the three strategic pillars are based on a multiyear study (2006-2013) of IT-based organizational change within a Swedish municipal organization, MuniPal. In our study, we traced MuniPal’s strategic effort to use IT to improve citizen service and become a citizen-centric organization. In particular, we drew on a critical event that unfolded in the latter parts of the study.

In 2011, citizens within MuniPal’s jurisdiction started showing symptoms of winter vomiting disease. As time passed, the problem steadily worsened, reaching a peak in April 2011 during a drastic turn of events. At this point, the symptoms — later discovered to be caused by Cryptosporidium contamination in the water supply — dramatically increased, affecting a large part of the population. Early figures pointed toward approximately 6,000 incidents of Cryptosporidium infection, but recent studies suggest that as many as 20,000 individuals may have been affected — a huge number given a city population of 70,000.

Thus, out of nowhere, came a critical test. Would MuniPal’s new service organization be able to handle the crisis effectively? Would the communication channels hold? Fortunately, MuniPal’s larger strategic effort to become citizen-centric proved worthwhile. Thanks greatly to reorganized communication channels and efficient use of the previously introduced SM technology, MuniPal managed the crisis well; reports of new infections sharply decreased only six days after the official state of emergency was declared. MuniPal’s SM commitment was, however, ongoing and well illustrates how SM technology can improve an organization’s ability to respond to changes in the external business environment. We found that whether an organization succeeds or not — particularly in the eyes of others — may depend on the responsiveness of external actors that managers cannot control.

In what follows, we offer more insight into the crisis that MuniPal came to face. We then conclude with a discussion, illustrated by our case, of the three aforementioned strategic pillars, which managers can use as guides as they navigate key managerial challenges associated with SM use.

SOCIAL MEDIA AND TIMES OF CRISIS

Extreme cases are a valuable source of knowledge, as they tend to make the phenomena of interest more visible.7 For our purposes, the Cryptosporidium crisis was also valuable in that it mirrored — albeit dramatically — what is increasingly becoming everyday reality for contemporary organizations. As part of larger value networks or ecosystems, organizations inevitably find themselves caught in paradoxical situations of incomplete knowledge despite information abundance. Establishing effective knowledge sharing and coordination — emergent, joint sensemaking — among multiple individuals and organizations across different levels and locations is therefore needed. Indeed, it is the key factor in an efficient crisis response.8

Due to the fast-changing, unpredictable nature of crises, responding to them effectively is easier said than done. As in assembling a puzzle, incomplete information must be managed by integrating various, highly localized sources of often only fragmentary information. As the Cryptosporidium crisis emerged, MuniPal was indeed in many ways operating in the dark. How were they to organize an efficient response to an event of which they had very little understanding? What would it entail?

Initially, the municipality relied on traditional channels of communication, such as local media and the municipal website. Realizing that the citizens were a key source of information, they also posted a survey online to gain a better understanding of the nature of the crisis. As time passed, however, they noted that these efforts would not be enough. Aided by their new citizen-centric IT infrastructure and organizational design, MuniPal began to actively communicate and integrate information across multiple channels. While a joint service center increased the understanding of both the crisis and citizens’ needs by monitoring calls and service requests, the information unit — unusual in its tight coupling to front-end service, a consequence of the citizen-centric organizational design — leveraged this knowledge to proactively engage with citizens using SM technology, particularly Facebook. Their aim was to be transparent, open, and perseverant — a response that came naturally to MuniPal as open dialogue formed a key element of their new citizen-centric approach to communication.

We applied our communication strategy in practice; we know that we should be open. It is in our bones.

— MuniPal communication officer

The organization was able to respond more or less instinctively due to the cultural change processes initiated through MuniPal’s concerted effort to use IT to facilitate and integrate citizens into organizational practice. Having opened a Facebook account prior to the crisis, MuniPal indeed found it natural to utilize it
in its effort to manage the crisis. As rumors and false information spread rapidly — not only causing fear but also inhibiting MuniPal’s ability to respond effectively to unfolding events — the organization quickly turned to Facebook to engage in a then-chaotic SM space.

Information travels so quickly, which makes it easy for somebody to start a rumor that all of a sudden becomes a truth. So therefore it was very important for us to be alert, to be present on social media as well as to respond to the fears of citizens, which might spread rumors that are not true. That was our strategy.

— MuniPal information specialist

**Communication Becomes a Two-Way Street**

Through this engagement, MuniPal’s response increasingly shifted from one of informing — a highly traditional approach to external communication and public relations based on the sender-receiver paradigm — to one of collaboration and mutual learning — an approach more attuned with the logic of shared sense-making. In this way, the organization became involved in a public dialogue that fostered learning processes both within and outside of the organization and therefore had impact well outside the SM space. This proved key, since it allowed the organization to tap into information and knowledge not easily accessible through traditional forms of communication, as these are predominantly unidirectional. Citizens helped MuniPal better understand the cause, scope, and spread of the contamination (e.g., temporal and spatial disease patterns) and how to work with them to contain the crisis (e.g., where to locate fresh water tanks). Through Facebook, citizens and managers came to continuously increase their understanding of unfolding events and thus how to better manage their continued response. While the emergent nature of the understanding made it hard to pinpoint a single piece of information or a single event as particularly critical, the chief of citizen service was adamant that SM was critical: “Without Facebook, we wouldn’t have made it.”

Engaging the community through Facebook was seen more as a strategic necessity than a strategic choice: the citizens had already taken the discussion into the social media space, and MuniPal had to follow. What the organization did, however, was to realize the need to actively engage within this space so as to channel external knowledge and not just provide more information. They saw themselves not as informers but as having a conversation: they sought a mutual tuning of understandings among actors with discrepant, incomplete information of the shared, unfolding event.

Facebook was therefore used as a rich site for learning and adjusting of organizational practice. Through its active engagement, MuniPal was also able to establish a shared arena where matters relating to the crisis could be discussed. In this way, MuniPal could better facilitate productive communication not only between MuniPal and citizens, but also among citizens themselves. This led citizens to categorize and structure existing information — for example, through crowdsourced maps — furthering the shared sensemaking process. Citizens became the municipality’s “eyes and ears” in the field.

Against this backdrop, SM technology offers key value propositions by addressing new managerial challenges. Increasingly, managers must rely on external actors, and SM can facilitate integration of knowledge among them. SM can help overcome exactly what troubles traditional communication forms: incomplete information. Efficient SM strategies capitalize on the fact that SM does not follow the sender-receiver paradigm, instead becoming a forum for shared sensemaking and emergent understandings. In this way, MuniPal’s use of SM became a shared accomplishment that integrally involved citizens.

**Stumbling Blocks**

MuniPal’s response to the Cryptosporidium crisis was primarily a success story, but it was not successful in all respects. Due to the fast-paced information flows enabled by SM technology, organizational communication structures were truly put to the test. While internal reorganization proved capable of supporting these flows — thanks largely to the integration of the citizen service and information units, two traditionally separate functions — interorganizational collaboration was lacking. Whereas citizens expected to find and discuss all answers in one place, organizations largely restricted their own communication to information directly related to their particular role in the larger response network. This issue was exacerbated by the fact that although the crisis stretched across jurisdictions (e.g., police, health administration, hospitals, public administrations), only MuniPal had a SM strategy capable of addressing events of this magnitude. Furthermore, communication officers were often reluctant to post information on issues they were not familiar with, due to the risk of posting “bad information.” As a result of the various organizations’ inability to produce a unified front, citizens came to question the reliability of certain information (e.g., because of information discrepancies between sources), and thus an otherwise successful crisis response produced negative experiences for some.
While such difficulties are not inherent to organizational responses that apply shared sensemaking to address incomplete information — poor information quality is always a challenge — they clearly show the need to think beyond the single organization when pursuing strategic SM use. Although MuniPal successfully managed to integrate the citizens in a shared response to the unfolding event, their failure to integrate other public and private organizations in a similar way hampered their response.

THREE STRATEGY PILLARS FOR SOCIAL MEDIA USE

The aim of this article is to offer key insights into the complexities of strategic SM use and provide a guide to the associated managerial challenges. Through our multiyear study of MuniPal, we showed how strategic investments in IT-based change allow organizations to respond effectively to external events and identified three strategy pillars for strategic SM use. We now discuss each of these pillars in more detail and offer illustrative examples of how they mattered in our study.

Don’t Respond to Your Environment; Respond with It

As strategic SM use involves participating in arenas where managers are no longer masters, it requires a shift in how managers perceive their environment and changes therein. While organizations may have grown accustomed to operating within well-defined, organizationally controlled structures, SM technology demands new firm strategies and tactics due to the way it inevitably positions organizations as mere nodes in complex networks of actors. Instead of treating the environment as an external contingency to dominate and control, managers should instead implement strategic change aimed at involving key external actors as collaborators. The real benefits of SM will only be achieved when managers actively let the business environment affect organizational practice.

Our case study shows how SM can prove key to effective organizational responses to emergent crises when organizations realize the need to view the environment as integral. SM technology provided MuniPal with an adaptive public arena in which information and knowledge could be shared, gathered, and continuously reflected upon by participants both within and outside the organization. In moving the discussion to an arena where citizens were already present, the municipality was able to tap into and shape external information flows on SM. This not only helped MuniPal access distant knowledge, it also allowed them to make better use of their traditional communication channels (e.g., Web and news media) as the shared sensemaking afforded by the strategic use of SM gradually improved both the quality and appropriateness of broadcast information. In particular, SM helped quell rumors and ease fears: while false information troubled MuniPal initially, their active engagement alleviated these issues quickly as corrective information could be given as needed.

Our study furthermore shows how SM technologies helped involve citizens in organizing the response. Throughout the incident, citizens frequently created and shared knowledge and collaborated with the authorities to make sense of the crisis; for example, by filling out surveys and structuring information. They also attempted to create crowdsourced maps so as to better pinpoint and understand instances of the infection. Key learning processes clearly took place both within and outside of MuniPal, processes without which the crisis would not have been effectively contained and ultimately resolved. Most importantly, MuniPal let these processes directly affect its organizational practice. Rather than as an isolated activity — management of an SM space — MuniPal saw SM as part of a greater response.

Don’t Invest in SM Technology; Invest in Organizational Transformation

SM technology is not a panacea. In order to tap into the power of SM, managers must transform their internal operations and let new and improved flows of information shape organizational practice. To this end, managers must first develop a clear understanding of how SM relates to their organization’s strategic intent and identify how SM technology can bring about strategic change in organizational practice and design. SM fundamentally breaks with the sender-receiver paradigm, and managers must embrace that change in order to capture value from SM and apply it toward shared sensemaking with external actors.

The value SM offers organizations is therefore tightly linked to the ways managers use it to tap into distant knowledge critical for organizational practice and view it as an occasion for transformational change. Especially where strategic intents include organizational capabilities such as responsiveness, this will require holistic, horizontal transformations across organizational structures and integration of traditionally disparate organizational units to enable interorganizational communication flows. Fragmented approaches to SM have limited potential to bring organizational value as the new information flows facilitated by such
The traditional shared sensemaking where information was incomplete and attuned to the needs of the receivers and also motivated a gap. This allowed MuniPal to provide information more seamlessly in and out of the organization. For example, if many people called the front-end service center with similar questions or concerns, online and offline communication shifted to address the emergent information gap. This allowed MuniPal to provide information more attuned to the needs of the receivers and also motivated shared sensemaking where information was incomplete. The traditional modus operandi for municipal organizations in similar cases is to broadcast information — assumed to be near-complete — through such channels as radio, TV, and Web. But in the face of incomplete information, MuniPal realized the need to participate in the already ongoing SM dialogue to both address false information and learn about the crisis together with the citizens.

The organizational transformation that preceded the crisis was integral to MuniPal’s successful response. The study therefore shows the critical importance of viewing social media investments as part of broader initiatives, both in terms of the value they provide for the organization (e.g., to improve citizen/customer contacts and organizational responsiveness) and in terms of the strategy work through which such initiatives are developed (e.g., putting necessary organizational structures in place). The municipality’s concerted, macrostrategic efforts to this end proved essential in two key ways:

1. As a citizen-centric organization, MuniPal realized that addressing the crisis entailed more than just containing the contamination. First and foremost, their job was to provide satisfactory service to citizens.

2. As part of their strategic transformation, MuniPal established tight links between external and internal communication on the one hand and front-end citizen service on the other. The integrated communication flow provided valuable cross-pollination, improving organizational performance at both ends of the organization.

Social Media Necessitates Rethinking Organizational Boundaries

Organizations increasingly find themselves part of complex value networks or ecosystems, which creates problems of incomplete information. Consequently, shared sensemaking may be required before any coordinated action from multiple actors in multiple organizations can take place. While intraorganizational change may alleviate some of these issues, managers should also identify key partners external to their organization and work with them to implement necessary interorganizational structures.

Our study of MuniPal shows how SM strategies should consider the larger interorganizational network. As noted above, several organizations were directly involved in addressing the crisis, but only MuniPal strategically leveraged SM in its response to the crisis situation. Ironically, MuniPal’s efficient response even led to a negative overall responsiveness when others failed to keep up with the increased pace afforded by SM technology. Citizens often expected to get all critical information from one place, but the existing transorganizational communication channels and collaboration networks could not facilitate such a unified front. This came to negatively affect citizens’ experience of MuniPal’s response both online and offline, suggesting that a lack of interorganizational integration may pose a key obstacle to strategic SM use. Organizations should therefore seek to integrate and align their SM initiatives within broader strategic transformations not only internally, but also externally to form key partnerships.

SUMMARY

In this article, we have addressed SM strategy and in particular how organizations can leverage SM technology. In so doing, we show that SM entails a different logic than traditional communication channels built around the sender-receiver paradigm, as the former begins with the assumption of incomplete information. Thus SM can facilitate shared sensemaking and emergent, collective understandings of unfolding events. Only when these emergent understandings influence and are influenced by other organizational practices,
however, is macrostrategic value likely to emerge. In other words, organizations should not just “look at” or “engage in” SM, but rather use it to adapt organizational practices toward emergent needs, whether these originate within the organization or its environment. The ability of SM to facilitate such tuning is indeed at the core of its value proposition.

Our findings underscore the importance of viewing SM investments as part of broader strategic initiatives (e.g., citizen-centricity), both in terms of the value that they are supposed to provide an organization (e.g., improved citizen communication) and how such investments are implemented (i.e., implementing necessary changes in organizational practice and design). While our identification of three SM strategy pillars adds to our understanding of SM strategy, additional studies are warranted. We hope this article will feed additional studies on the macrostrategic role SM technology can play in organizational settings. For practitioners, these pillars represent useful guidelines to strategic SM use, and so refinement will be appreciated by researchers and practitioners alike.

ENDNOTES


9Treem and Leonardi (see 3).

10Galliers (see 2); Arvidsson et al. (see 1).

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Improve Social Media’s Balance Sheet

Organizations are using social media to accomplish a number of business objectives. However, what business objectives are being most aggressively pursued through social media is unclear. In this article, we examine and analyze the use of Facebook by the Big 4 accounting firms (Deloitte, Ernst & Young, PricewaterhouseCoopers, and KPMG) to identify the most prominent business objectives these firms are attempting to achieve through their use of social media. After discussing our findings, we offer suggestions for more fully exploiting social media as well as a few words of caution. While our study focused on the social media efforts of the Big 4, our recommendations are also applicable to non-accounting firms currently utilizing social media or considering the adoption of social media.

WHY SOCIAL MEDIA?

Organizations have been rapidly adopting social media in various forms, ranging from comments on their proprietary websites to formalized platforms like Twitter and Facebook. The potential for innovating with social media has attracted many businesses. For example, in 2012, 66% of Fortune 500 companies reported having a Facebook page.

Organizations can leverage social media for a variety of purposes, including the creation of platforms for sharing and exchanging knowledge. Although many organizations feel a sense of urgency to utilize social media, the contribution that it can make to an organization is not certain. Before engaging in social media, organizations should consider their goals, strategies to achieve these goals, tools and resources that are needed, implementation plans, and risks associated with social media.

GOALS MAY INCLUDE DEVELOPING ONE’S IMAGE AS AN INDUSTRY THOUGHT LEADER, IMPROVING CUSTOMER RELATIONSHIPS AND ATTRACTION NEW CUSTOMERS, BRAND DEVELOPMENT, RECRUITMENT, AND PROVIDING INDUSTRY UPDATES AND INFORMATION. Despite these opportunities, some firms have either not identified explicit goals or are not realizing the benefits from their social media strategies.

SOCIAL MEDIA USE: A CASE STUDY OF ACCOUNTING FIRMS

The potential for achieving business objectives with social media use is unlimited. To assist with identifying specific objectives that can be accomplished with social media, we examined the social media usage of the Big 4 accounting firms. To conduct our case study, we used content analysis to classify Facebook messages posted by these firms according to the specific business objective that each message was most closely associated with. Because of the rapid evolution in social media use that has occurred in recent years, we analyzed Facebook messages posted in 2012. We performed this analysis for both the firms’ main Facebook fan pages as well as their career pages. (Career pages are specifically dedicated to recruiting efforts, such as announcing career opportunities in the firm, as well as highlighting employee activities and achievements.) The business objective categories we used in this analysis were adopted from University of South Carolina business professor Robert Ployhart’s categorization, as shown in Table 1.

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recruitment/selection</td>
<td>Identification of potential employees</td>
</tr>
<tr>
<td>Socialization/onboarding</td>
<td>Enhancement of the individual’s association with the organization</td>
</tr>
<tr>
<td>Training/development</td>
<td>Skill development and training</td>
</tr>
<tr>
<td>Knowledge sharing</td>
<td>Efficient dispersion of information to mass audiences</td>
</tr>
<tr>
<td>Branding/marketing</td>
<td>Customer relationship development and management</td>
</tr>
<tr>
<td>Creativity/problem solving</td>
<td>Enhancement of innovation and problem-solving outcomes</td>
</tr>
<tr>
<td>Influencing organizational culture/change</td>
<td>Promotion or modification of organizational culture</td>
</tr>
</tbody>
</table>
From the combined Facebook messages on the fan pages of the Big 4 accounting firms, we found that the business objective pursued most notably was knowledge sharing (54.5% of all messages), as shown in Figure 1. Examples of knowledge sharing include industry updates and advice. The next most salient business objectives being pursued were branding/marketing (25.0%) and socialization/onboarding (19.4%). The business objectives that received only minimal Facebook message posts were training/development (0.5%), recruitment/selection (0.3%), and influencing organizational culture/change (0.3%). There were no posts associated with the business objective of creativity/problem solving.

From the combined Facebook message posts on the career pages of Big 4 accounting firms, we found that the business objective pursued most vigorously was socialization/onboarding (42.1%), as shown in Figure 2. The next most noteworthy business objectives were knowledge sharing (28.4%) and branding/marketing (26.2%). The business objectives pursued to a lesser extent were recruitment/selection (2.7%), influencing organizational culture/change (0.3%), and training/development (0.3%). Similar to the posts on the fan pages, there were no posts associated with the business objective of creativity/problem solving.

<table>
<thead>
<tr>
<th>Business Objective</th>
<th>Percentage of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge sharing</td>
<td>54.5%</td>
</tr>
<tr>
<td>Branding and marketing</td>
<td>25.0%</td>
</tr>
<tr>
<td>Socialization and onboarding</td>
<td>19.4%</td>
</tr>
<tr>
<td>Training and development</td>
<td>0.5%</td>
</tr>
<tr>
<td>Recruitment and selection</td>
<td>0.3%</td>
</tr>
<tr>
<td>Influencing organizational culture/change</td>
<td>0.3%</td>
</tr>
<tr>
<td>Creativity and problem solving</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

Figure 1 — Facebook fan page message posts by business objective.

<table>
<thead>
<tr>
<th>Business Objective</th>
<th>Percentage of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socialization and onboarding</td>
<td>42.1%</td>
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<td>Knowledge sharing</td>
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</tr>
<tr>
<td>Branding and marketing</td>
<td>26.2%</td>
</tr>
<tr>
<td>Recruitment and selection</td>
<td>2.7%</td>
</tr>
<tr>
<td>Training and development</td>
<td>0.3%</td>
</tr>
<tr>
<td>Influencing organizational culture/change</td>
<td>0.3%</td>
</tr>
<tr>
<td>Creativity and problem solving</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

Figure 2 — Facebook career page message posts by business objective.
As we can see, the key business objectives being pursued on the Facebook fan and career pages of Big 4 accounting firms are consistent in that these messages are mostly addressing knowledge sharing, socialization/onboarding, or branding/marketing, albeit to different extents. Comparing the results for fan versus career pages, these accounting firms are primarily using their fan pages for knowledge sharing and using their career pages for socialization/onboarding. However, the top three business objectives pursued with fan page posts are the same top three business objectives pursued on career pages. Hence, the use of Facebook by Big 4 accounting firms is focused on three key business objectives, while others (i.e., training/development, recruitment/selection, and influencing organizational culture/change) are pursued minimally. The business objective of creativity/problem solving was not pursued on either fan or career pages.

All types of firms can utilize the list of business objectives presented in Table 1 to evaluate their own social media usage or identify business objectives they may pursue. They can use social media to share industry knowledge and expertise, connect with potential customers or employees, and advertise their services or special offerings in order to enhance their brand and marketing efforts, as the Big 4 accounting firms are doing. Nor are these the only possibilities. Firms may want to extend their usage of social media to enhance training and employee activities (e.g., topic discussions) or to collect information on recruits and answer specific questions. By providing specific examples of employees demonstrating the organization’s culture, organizations can use social media to emphasize firm-wide values. In addition, organizations may utilize social media as a problem-solving platform in which issues are proposed and individuals are encouraged to propose creative solutions. Social media can be used to generate novel solutions from the collective knowledge and wisdom of its participants or through specific crowdsourcing activities.

**Insights From Accounting Firms’ Social Media Use**

As noted above, the main focus of the Facebook fan pages of Big 4 accounting firms is knowledge sharing, followed by branding/marketing and socialization/onboarding. These firms are using Facebook fan pages as one of their primary mechanisms for reaching out to share their expert knowledge as well as announce special events or activities that they are organizing. For example, they provide updates on industry trends and regulations, highlights of discussions by thought leaders, and strategies and advice for addressing industry issues and challenges. In addition to knowledge sharing, other Facebook fan page messages are related to promoting their brand and services as well as enhancing the inclusiveness of their community by getting existing and potential clients, employees (past, current, and future), and interested social media participants (e.g., universities and accounting student organizations) more involved and acquainted with the firm. Clearly these are objectives that any firm could pursue through social media.

The posts on the Big 4 firms’ Facebook career pages differed somewhat from those on the fan pages in that they focused mainly on socialization/onboarding followed by knowledge sharing and branding/marketing. While the Big 4 accounting firms use Facebook career pages to interact with those interested in pursuing a career with their firms, we found that these messages were directed not only toward individuals outside the firms (i.e., potential employees), but also toward their existing employees. Some of the career page messages were devoted to greeting new employees and interns, sharing successful employee stories, fostering engagement among employees or teams within the firm, holding one-on-one discussions with specific users, and requesting community members to share opinions on a particular discussion topic. Hence, these messages facilitate making connections and fostering identification with the firm, and enhancing and facilitating socialization within and outside the firm. Non-accounting firms may also be interested in utilizing career pages to achieve these business objectives.

Interestingly, the findings suggest that recruitment/selection efforts on Facebook career pages are mainly carried out indirectly through socialization/onboarding (42.1%) and much less frequently addressed directly (i.e., recruitment/selection only takes up 2.7% of all messages). We believe this is because Facebook is not currently considered an appropriate platform for certain recruitment-related activities, such as posting résumés, scheduling and conducting interviews, or shortlisting candidates. However, both accounting and non-accounting firms may consider this as a potential business objective to pursue in the future.

**ADDITIONAL OPPORTUNITIES TO LEVERAGE SOCIAL MEDIA**

Social media is unique in that it allows user-generated contributions through interactive platforms. For businesses, this means letting external participants provide content — something that has historically been developed by the business — and allowing that
content to be instantly displayed on platforms that can be seen by the masses. Naturally, this introduces new risks if negative or undesirable content is generated or the platform is not properly developed or managed. It may therefore be difficult to identify which business objectives can be successfully achieved with this less controllable, community-driven platform. Based on our findings, we believe the Big 4 firms have additional opportunities to leverage social media to include recruitment/selection, training/development, influencing organizational culture/change, and creativity/problem solving. Of course, other firms may assess their social media usage and find that they could likewise benefit from pursuing these areas through social media.

Recruitment/Selection
Recruitment/selection may be indirectly pursued through efforts to achieve the business objectives of socialization/onboarding and branding/marketing. However, more explicit efforts can be made, such as extending the interview or application process through social media. Firms could post screening questions and allow potential employees to submit answers. Alternatively, job candidates could create video responses to questions and provide links to them. Considering the limited amount of time in which face-to-face interviews take place, leveraging social media can allow hiring managers to pose a more thorough set of interview questions. Also, social media can provide candidates the opportunity not only to develop more substantial, well-constructed responses to questions, but also demonstrate that they have the problem-solving skills needed for the job. Effective written communication is vital in many (perhaps most) positions, and utilizing social media can provide a means of evaluating this skill. Although using open social media platforms could present privacy and security issues, companies can utilize a private network after initial candidate screenings.

Training/Development
Firms can also consider leveraging social media for training/development purposes. For instance, managers can propose a particular topic and encourage participants to submit responses or share knowledge on that topic. Individuals could then comment on others’ responses or correct any inconsistencies. These discussions can lead to deeper or more detailed knowledge of a topic, and the associated discussion threads can provide a history that others can reflect upon in the future. Alternatively, firms could present information on their Facebook pages and encourage community members to submit questions — or provide answers to questions — about the material. Social media can provide a platform for content experts to offer their perspectives and then allow others to ask questions.

Culture Shifts or Reinforcement
Social media can also be used as a tool for influencing organizational culture/change. Statements by the firm or the firm’s leadership can be posted to provide insights into the organization’s vision and what defines it. The organization’s values can be echoed in repeated posts, and examples of these values can be put into specific actions that are documented in posts. In addition, ideas and suggestions for putting these values into action can be solicited from employees and shared with others in the community. Recognition of individuals or teams that demonstrate the values of the firm or have achieved specific organizational goals can also be shared. Social media can be utilized to conduct surveys or polls to assess external or internal perceptions of the organization’s culture.

Innovation
Social media can also be leveraged as a platform to facilitate creativity and problem solving. Firms can utilize social media to identify individuals with varied expertise who can be brought together to exchange or develop ideas, even if they are geographically separated. Hence, the collective knowledge of the group can be gathered, disseminated, and further developed. In addition, organizations can use social media tools to brainstorm solutions to existing problems and to foster the individual and team creativity necessary to develop new products, services, or processes. While a firm might limit the social media platform to internal users, it could allow external parties, such as clients, to participate in creativity or brainstorming exercises. Organizations can likewise engage in crowdsourcing and pose issues (or potential issues) to solicit solutions.

Build Firm Identity
Although accounting firms are already utilizing social media for socialization/onboarding, there are additional opportunities for building a firm identity that industry members, clients and would-be clients, employees (past, present, and future), and other interested parties (e.g., student groups) can relate to. The two-way communication available in social media allows firms to publicize and promote their values, such as those related to social responsibility (e.g., a firm’s commitment to green practices). For any firm, building an identity that the firm’s community can
relate to goes hand in hand with branding/marketing and can extend business opportunities and enhance customer relationships. Social media can also be used to strengthen a firm’s associations with employees, clients, and industry members by providing opportunities for participation and contributions that can influence or serve as inputs in shaping the firm’s practices and policies.

WORDS OF CAUTION

Applications of social media can, however, be a double-edged sword. On the one hand, social media can create business value by improving existing customer relationships, enhancing employee loyalty, inspiring new or improved products, and identifying new customers or opportunities for extending product or service offerings. It may even uncover opportunities for new business models and strategies. On the other hand, social media can negatively impact a firm’s reputation if it is not managed carefully. Therefore, organizations should take into account the following words of caution.

Viral Marketing

Because of the participatory nature of social media, firms are unable to have complete control of their marketing message and its distribution. Social media participants may take a firm’s marketing message and provide additional comments that change the message, sometimes in less than desirable ways. This modified message can then be quickly shared with others, with additional amendments to the message being made and delivered. Therefore, firms must monitor messages carefully and attentively and acquire or dedicate the appropriate resources to managing social media.

Viral Complaints

Although social media provides a platform for satisfied clients or customers to share their enthusiasm for a firm’s products or services, that platform can also be used to vent frustrations or negative experiences. Individuals may quickly use social media to criticize the firm’s practices or complain of the firm’s response (or lack thereof) to a particular issue. Even though negative posts such as these may be deleted, customer service can suffer and customer dissatisfaction can arise when firms delete such posts.

For example, even though social media has tremendous potential for viral marketing and branding, where word-of-mouth about creative products and excellent services can spread widely and at lightning speed, complaints can go viral just as easily. On 14 October 2012, a loyal customer of AT&T, Wynter Farmer, submitted a complaint to AT&T’s Facebook page that went viral. Because AT&T did not react quickly or respond to the complaint on Facebook, the post received more than 830,000 likes in less than two months and may have damaged AT&T’s reputation. As this experience demonstrates, careful and prompt handling of customer complaints is important. Having a social media presence not only creates additional work for a firm, including regular monitoring of messages on social media, but it also requires the firm to come up with a set of standard operating procedures to handle complaints and exceptions in a timely manner.

Oversharing and Inappropriate Use

Social media’s openness and ability to allow contributions by the masses can also create the possibility that employees or partners may expose confidential information or otherwise use social media inappropriately. This may be due to a lack of knowledge regarding the firm’s policies and procedures for protecting confidential information and complying with applicable regulations. Alternatively, the firm may not have policies and procedures governing the use of social media. Hence, explicit social media policies and procedures that consider information confidentiality, legal issues, and potential regulatory compliance are needed. Training in and communication of these policies and procedures are also essential.

CONCLUSIONS

Social media presents new opportunities to achieve business objectives, with some business objectives being more aggressively pursued than others, as our case study shows. All firms currently using social media can utilize these results to self-assess their own usage and potentially discover new ways to leverage social media. Firms can align their actual usage with their existing goals, align these goals with the seven business objectives noted, and then identify any potential gaps or business objectives that are not being pursued but could be achieved. Firms that are considering the use of social
media, or have started using social media but have not yet developed clear goals or objectives, can utilize the seven business objectives we have highlighted to identify potential opportunities to leverage social media to create business value.

ENDNOTES

2Loop and Malyshev (see 1).
5Schlinke and Crain (see 4).
6Schlinke and Crain (see 4).
8Ployhart (see 7).
9Ployhart (see 7).
11Dzikiy, Phil. “Viral Facebook Post on AT&T FaceTime Limit Hits 690k Likes.” iLounge, 29 October 2012.

ACKNOWLEDGMENT

We would like to thank Venkata Rajasekhar Telaprolu and Aniket Dalvi at the Missouri University of Science and Technology for their assistance in coding the Facebook messages.

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The impact social media is currently having on society is enormous. The proliferation of social media at various layers in society has emerged as a defining factor in making an entire country go democratic or an enterprise taking a revolutionary route to reinvent itself. The prominence of social media in various forms has left many wondering how to get true, long-term value from its use. A Facebook “like” may offer quick, short-term gratification, but for long-term sustenance of a brand, it is necessary to build social media programs that engage and involve your customers and make them your brand ambassadors in the online world.

Many brands treat social media as a mere broadcasting tool. They forget the word “social” in social media and never see it as an opportunity to initiate a meaningful dialogue with consumers. Yet proactively pursuing this opportunity helps to build long-term relationships, leading to better sales and long-term customer loyalty.

Though management often has the desire to leverage social media and is increasingly willing to spend on such initiatives, the challenge still remains as to how to get better ROI on the investments made. The intent of this article is to address what occupies the minds of most CIOs and decision makers as they discuss these investments in tough economic conditions.

SOCIAL MEDIA MATURITY MODEL

Later in the article, we will look at a model that helps organizations measure the ROI of their investments in social media. But first we present the Social Media Maturity Model, which will enable us to understand enterprise maturity in the social media and analysis space. An enterprise’s level of social media maturity will be a good predictor of its ability to achieve significant ROI on its social media investments.

Level 1: Reactive

- There is no consistent approach defined for social media initiatives across the organization.
- Governance and processes do not exist for social media usage within and outside the enterprise.
- Different technologies and solutions are used for various implementations across the organization.
- There is no buy-in or support from senior management on social media adoption and rollout.
- No common group has been identified for anchoring social media–related initiatives.

Level 2: Proactive

- A centralized social media group is responsible for all the initiatives but finds it challenging to drive social media adoption.
- Few departments within the organization are convinced about social media, and thus adoption is happening in silos.
- Some products and technologies are standardized but are still not used consistently across the organization.
- Governance and processes exist, but they are still in an evolving stage and have not been adopted completely by various departments.
- No frameworks exist for measuring the success and ROI of different initiatives.

Level 3: Predictive

- An organization structure is in place for driving and managing various social media programs.
- A well-defined social media strategy exists with governance and processes defined and enforced.
- Technology, architecture, and a roadmap are in place and standardized for existing and new implementations.
- A well-defined mechanism is available for measuring the ROI on various social media programs.
- An approach has been defined for analyzing inputs and feedback from different social media programs and for creating actionable initiatives.
WHERE IS SOCIAL MEDIA ANALYSIS USED IN AN ORGANIZATION?

The types of social media initiatives can be broadly classified into those that are internal or external to the organization. A few use cases are listed below:

**Internal to the Organization**
- Workforce collaboration
- Knowledge management across departments
- Ideation within the organization
- Improving sales effectiveness

**External to the Organization (with Customers and Partners)**
- Analyzing public sentiments about campaigns and product feedback
- Customer/partner collaboration
- Social customer support
- Brand awareness and new product launches

THE 4C APPROACH TO BUILDING A SOCIAL MEDIA STRATEGY

Depending on their maturity (as determined by the previously described Social Media Maturity Model), companies can leverage the advantages of social media using the 4C strategy, which consists of Content, Communication, Community, and Collaboration (see Table 1):

- **Content** refers to both user-generated content and content published by enterprises. Widely available tools and technologies enable users to generate content — video, audio and images — and facilitate the participative process. A company’s social media strategy must empower consumers and employees to create content in a trouble-free manner. The company can then use the content as a feedback mechanism for social media initiatives. For example, the company might post videos and images to promote a newly launched product, while end users of the product can be encouraged to create videos and images about how the product is impacting their lives.

- **Communication.** Enterprises must have a clear strategy on the varied channels through which they want to communicate with their employees, partners, and consumers. Blogs are an effective means of communication where enterprises can have key stakeholders register their thoughts on some key issues and strategies. Direct internal and external communication of key messages by senior management can have a significant impact on stakeholders.

- **Community** is a powerful means of bringing together like-minded people on a single platform where they can connect with each other and collaborate on common themes. Community establishes a sense of belonging and engenders a trust factor among members, which helps in the sharing of knowledge and enables co-creation. A company can create a community focused on its products and services, so that the actual end users of these products and services can be part of the community and collaborate with other users or with key stakeholders in the enterprise.

- **Collaboration** tools provide a means for diverse teams to work together effectively to achieve a common goal. Wikipedia is a classic example of the effectiveness of collaboration, where millions of encyclopedia articles are created and updated successfully by people from all around the world. Effective utilization of collaboration tools improves team productivity and enhances output quality.

What binds this strategy into an active endeavor culminating in benefits for the enterprise is the Listen, Engage, and Act process. An ongoing process that helps enterprises reach the end goal of their social media initiatives, it entails listening to stakeholders, engaging them in productive conversations, and taking visible actions on their feedback.

<table>
<thead>
<tr>
<th>Area</th>
<th>Purpose</th>
<th>Social Media Tools/Technologies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content</td>
<td>Creation and distribution of quality content</td>
<td>Videos, photos, audio, content aggregation, widgets, mashups</td>
</tr>
<tr>
<td>Communication</td>
<td>Internal and external official communications</td>
<td>Blogs, microblogging, events, chats, podcasts, RSS feeds</td>
</tr>
<tr>
<td>Community</td>
<td>Bringing like-minded people together for a common purpose</td>
<td>Community applications such as portals and forums, used to form developer communities, product communities on mobiles, etc.</td>
</tr>
<tr>
<td>Collaboration</td>
<td>Collaboration among employees and partners</td>
<td>Wikis, discussion forums, ask and answer, reviews and ratings, social bookmarking, tagging</td>
</tr>
</tbody>
</table>
WHY IS IT DIFFICULT TO MEASURE ROI FOR SOCIAL MEDIA ANALYSIS INVESTMENTS?

Unlike investments that are driven by a single department and affect only the KPIs of that department/function, social media initiatives can cut across various departments within the organization, such as marketing, IT, customer service, and others, in terms of involvement and impact. This can make it difficult to measure the ROI of such investments.

Following are some of the challenges in measuring the ROI of social media analysis investments:

- Social media initiatives and returns are unique to each organization and scenario, and hence no standards exist for measurement.
- There is no standard rule for creating success from the first social media initiatives; success comes through an iterative process and applying the learnings. This scenario varies across initiatives and organizations.
- Social media initiatives are more suited for long-term relationship building and value creation than short-term returns. The longer time frame makes measuring ROI more difficult.

While these factors certainly make measuring ROI for social media analysis investments a challenge, there are elements that enterprises can put in place to measure and evaluate the ROI of social media investments. We’ll turn to them now.

AN ROI MEASUREMENT MODEL

Generating new revenue streams, collaborating with customers and business partners, sensing customer sentiment — there are many reasons to adopt social media. But what is the best way to go about it, and how can you measure the results once you have? Is there a model for getting started? Here we attempt to provide such a model, which consists of:

- A process framework
- Metrics and enablers for an ROI measurement model

Process Framework

The process of measuring the ROI of social media initiatives needs to be well planned and should contain the following elements:

- Business goals and objectives. This refers to the organization’s goals that are necessary to attain business success. A universal business goal is to run a profitable operation by increasing revenue and limiting costs. The objective here might be to increase annual sales by, say, 10%.
- Social media goals and objectives. If sales have to increase, then awareness of the relevant products on social media platforms also needs to increase. The most common social media goal is to increase awareness of the brand, thus increasing brand recognition and online influence. The objective here has more to do with the width and depth of the brand influence and in turn the network influence (which has to do with the impact of our influencers).
- Social media metrics. Metrics are used to help us analyze what is working and what is not — necessary information if the organization is to reach its goals. With any kind of investment, management will look at the ROI, which will decide the fate of the initiative. Conversion, growth, and retention rates are some of the common social media metrics. In the next section, we list some key metrics and enablers for ROI measurement.
- Social media measuring tools. These tools can quickly be a feeder service and an input to the metrics that we have defined. There are many measurement tools available that not only analyze particular pages on social media sites, but also monitor the health of the brand. They can also measure the popularity of and engagement with a particular product in a consumer segment of the respective brand. It is not just about having a social media presence, but also about continuously monitoring it.

Metrics and Enablers for an ROI Measurement Model

While talking about metrics and enablers of social media ROI, it is important to decide which metrics to focus on and define a way to measure these metrics on an ongoing basis. This may require investments in tools and technologies as well as process changes to ensure that the metrics are captured during every step of execution.

In addition, the metrics may vary depending on the focus area, goals, and objectives of the social media initiative. The following lists provide some of the key metrics for social media initiatives, which can help in measuring the ROI:
**Project Collaboration**
- Improvement in on-time delivery and the quality of projects delivered due to better collaboration
- Productivity improvement due to faster searching and gathering of information across multiple units and geographies
- Time saved by leveraging existing content

**Sales and Marketing**
- Increase in number of deals per year due to better collaboration and faster connection of people
- Reduction in cost of executed campaigns due to content reuse and leveraging of campaign tools
- Time saved by reusing and leveraging existing content
- Increase in number of page views due to social campaigns
- Conversion of visitors to customers due to social campaigns

**Customer Support**
- Reduction in call volumes due to enabling self-support and peer-support
- Time saved by reusing existing content results in reduced average turnaround time of support tickets
- Client satisfaction measured through ratings from support tickets resolution

**Product Development**
- New product ideas generated
- Reduced time to market due to better collaboration across departments.

ROI can be measured directly in the revenue that we earn. But measuring social media through the “social” angle is important, too. The value the brand gets by nurturing a relationship is called “return on relationship” (ROR). Loyalty, sharing, and recommendations not only increase the ROR index, but in time they might also shape your revenue curves. The more value you amass on the ROR index, the greater the possibility of earning better revenue percentages. This will surely have a say in the ROI. Other enablers such as technology and infrastructure can be investments in CAPEX form or can be bought as services.

**CONCLUSION**

Technology offerings are maturing in the social media analysis landscape, but only early adopters have gone a step ahead and leveraged them to produce business outcomes. For example, one leading high-tech consumer products company continuously monitors the social media conversations its consumers are having about its products to identify issue areas and respond to them proactively before an issue goes viral. Many enterprises use social media interactions for customer support, improving client satisfaction while at the same time reducing the number of calls to the support center.

Clearly social media analysis is here to stay, and we hope that the framework we have described will help organizations pursue — and measure the effectiveness of — their own social media programs. As part of our ongoing work, we intend to pilot this framework to measure the metrics and assess the improvement trend across identified areas, types of companies, and intended outcomes.

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— Doug Mikaelian, VP Business Technology, Dairy Farmers of America
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For more information, contact Cutter Consortium at +1 781 648 8700 or sales@cutter.com.

The Cutter Business Technology Council

The Cutter Business Technology Council was established by Cutter Consortium to help spot emerging trends in IT, digital technology, and the marketplace. Its members are IT specialists whose ideas have become important building blocks of today’s wide-band, digitally connected, global economy. This brain trust includes:

- Rob Austin
- Ron Blitstein
- Tom DeMarco
- Lynne Ellyn
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