



## Adaptive Social Media in Life Sciences

### Executive Summary

In 2011, 74% of pharmaceutical companies had adopted social media technologies – a higher rate than financial services and retail.<sup>1</sup> While many pundits argued that the lack of Federal Drug Administration (FDA) guidance would restrict the use of social media channels, pharmaceutical and other life sciences companies are holding their own by adapting to the regulatory ambiguity to meet the needs of their diverse customers and a mandate for rapid change.

Adding to the regulatory risks of violating existing or impending FDA regulations is a rapidly changing landscape of social media monitoring and analytics solutions. There are hundreds of free, paid, integrated, standalone or platform solutions vying for attention. The complexity of using advanced technology to collect social media data for insight into customer preferences and behaviors seems well-suited to the data-driven approach that life sciences companies adapt to many aspects of their business models to remain agile and customer-centric.

This white paper lays out how life sciences companies can apply their expertise in data collection and analysis to harness the potential upsides of social media, while mitigating the downsides.

### Adaptive Design

Over the past decade, increased shareholder pressure, global competition and complexity of

the healthcare system have forced life sciences companies to be more nimble and innovative. An example is the adaptive clinical trial process that has been rapidly adopted and approved by the FDA. In 2006, the Pharmaceutical Research and Manufacturers of America (PhRMA) put forth the following definition: “Adaptive design is referred to as a clinical trial design that uses accumulating data to decide on how to modify aspects of the study as it continues, without undermining the validity and integrity of the trial.”<sup>2</sup>

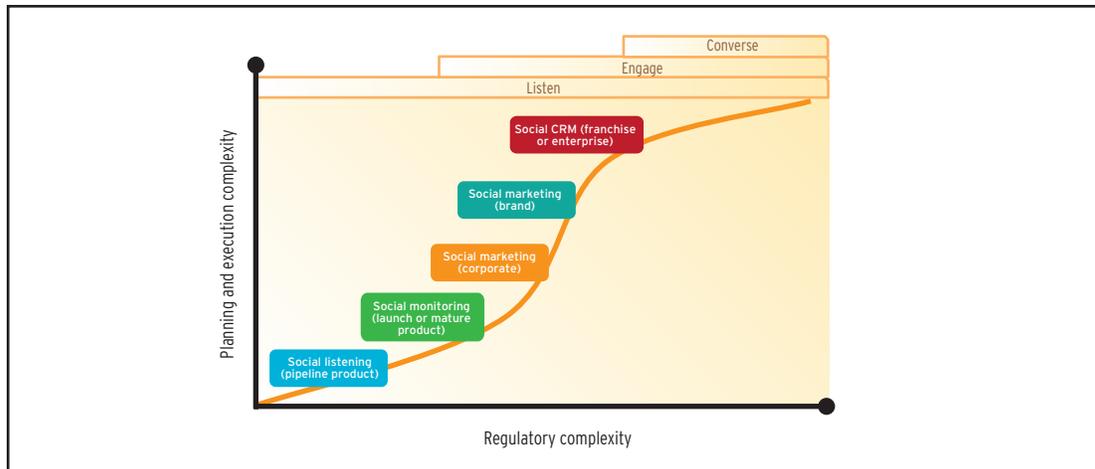
Applying the adaptive design to social media means that life sciences companies accumulate data to decide on how to modify aspects of customer engagement as it continues, without undermining the trust and equity in the brand or organization.

What is common to the adaptive design in clinical trial and in social media strategies is:

- **Big data:** Accumulation of large amounts of data.
- **Descriptive and predictive analytics** to reduce options to the best set.
- **Continuous learning**, creating multiple sequential learning opportunities.
- **Well-defined endpoints.**

In both cases, the adaptive process also leverages data and analytics to reduce cycle times and improve success rates in a complex operating environment.

## Social Media Usage Maturity Curve



Source: Google Insights for Search, <http://www.google.com/insights/search>  
Figure 1

### Constraints and Opportunities

Life sciences companies are prioritizing social media initiatives based on five key aspects of their business.

#### Product Lifecycle

While large life sciences companies are managing mature brands with impending patent expiry, the industry also has more than 3,000 potential new

treatments in development.<sup>3</sup> Mature products require more careful use of social media due to adverse event and off-label reporting requirements. Social media monitoring and analysis can be performed against a larger set of information and analytical objectives for product positioning, physician attitudes or general market

research, since there is less risk of capturing product complaints or adverse events that the analyst would need to report.

#### Therapeutic Category

Data velocity and social media user engagement can vary by disease state. For example, breast cancer patients are 12 times more engaged than diabetes patients.<sup>4</sup> The likelihood to engage and the amount of data available for collection and analysis has implications for how social media can be used (too much will be difficult to process, too little will be inconclusive).

#### Corporate Culture

Scientific and technological innovation, customer-centricity, operational excellence and risk management affect an organization's choice of social media activities. Customer-focused organizations may deploy listening devices through social media channels at the corporate level to open a dialogue with customers (e.g., extending their customer service departments). Commercial operations experts can add social media to existing promotional channels to improve engagement (e.g., support existing offline and digital promotions).

#### Regulatory Environment

Regulatory compliance teams are challenged to interpret the limited set of rules that apply to social media to ensure compliance. The complexity of digital marketing, and the increasing regulatory affairs workload, typically determine which social media initiatives are prioritized.

#### Stakeholder Needs

As patients, caregivers, healthcare companies and physicians increase their use of social media, life sciences companies are looking for ways to participate. The quality of the information and the amount of customer interaction is a driver of when and how life sciences companies engage.

#### Execution

As social media usage matures (see Figure 1), its functions are becoming more clearly defined. For instance, companies now have a better under-

The quality of the information and the amount of customer interaction is a driver of when and how life sciences companies engage.

standing of the planning and resources required to execute the following functions.

- Listening/monitoring.
- Publish/share/discuss/review.
- Gaming.

Opportunities exist to iterate within each function while improving the organization's ability to execute other social media functions.

### Applied Examples of Adaptive Social Media

Listening to social media in the pipeline drugs arena offers many opportunities to collect information on patient needs, physician treatment habits, product positioning and competitive intelligence without having to implement full regulatory rigor. This approach casts a wide net for analysis and then focuses on one specific clinical, attitudinal, geographic or set of financial topics based on information processed.

On the other hand, social listening for mature brands requires more planning and resources to ensure that adverse events and off-label information is appropriately handled. These projects typically have narrower datasets and analytical objectives. This approach provides baseline sentiment and analysis for brands that are already on the market.

After having executed social media listening and monitoring projects, many companies have regulatory precedents to contend with. They also have attained some level of customer intelligence, which allows them to create bi-directional links with customer segments (corporate or brand-level). Physician and patient communities, corporate information centers and patient help lines are typical social media implementations.

At this stage, projects are more focused on content creation to engage customers. Social media activities can then move from analyzing

the "behavioral exhaust" to creating "stimuli" for increased social interactions. Iterations on this type of analysis are limited only by customer engagement and the "virality" of the content. Social customer service is emerging as a new standard, as customers expect faster response times and organizations strive to reduce their costs.

The next step after "social customer service" is social CRM, where interactions are in the service of identified healthcare providers and patients. With social CRM, social media activities are integrated in customer management systems and supported by dedicated resources, providing a truly complete view of the customer. Solutions providers are only now curating lists of physicians, affiliations and online relationships to inform their analysis.

Social CRM allows customers to interact with brands in the moment of engagement without the burden of e-mail or customer service calls. In turn, organizations can better understand customer preferences and who influences those preferences online.

### Conclusion

Life sciences companies' core competencies in data collection, applied analytics and insight generation are well suited to social media. Furthermore, new, flexible processes such as adaptive design provide frameworks that can be applied to other business areas, as well as enable more dynamic, cost-efficient and decision-oriented ways of operating. Understanding the resource requirements and planning for the business constraints for the right social media functions can help create an accelerated path to social media maturity.

Life sciences companies' core competencies in data collection, applied analytics and insight generation are well suited to social media.

## Footnotes

- <sup>1</sup> Jacques Bughin, Michael Chui, Angela Hung Byers, "How Social Technologies are Extending the Organization," *McKinsey Quarterly*, November 2011 <http://goo.gl/PeBe2>
- <sup>2</sup> *Journal of Biopharmaceutical Statistics*, Vol. 16, No. 3 (2006), 275-283
- <sup>3</sup> Jenni Brewer, "2011's New Medicines Fought a Wide Range of Diseases, Conditions," PhRMA, Dec. 21, 2011 <http://goo.gl/lcY13>
- <sup>4</sup> Melissa Davies, "Understanding the Impact of Social Media," Return on Focus, June 2010 <http://goo.gl/TRPvn>

## About the Author

Alex Gochtovtt is a Principal with Cognizant's Enterprise Analytics Practice, working within its Digital Analytics Center of Excellence. He can be reached at [Alexander.Gochtovtt@cognizant.com](mailto:Alexander.Gochtovtt@cognizant.com).

---

## About Cognizant

Cognizant (NASDAQ: CTSH) is a leading provider of information technology, consulting, and business process outsourcing services, dedicated to helping the world's leading companies build stronger businesses. Headquartered in Teaneck, New Jersey (U.S.), Cognizant combines a passion for client satisfaction, technology innovation, deep industry and business process expertise, and a global, collaborative workforce that embodies the future of work. With over 50 delivery centers worldwide and approximately 130,000 employees as of September 30, 2011, Cognizant is a member of the NASDAQ-100, the S&P 500, the Forbes Global 2000, and the Fortune 500 and is ranked among the top performing and fastest growing companies in the world. Visit us online at [www.cognizant.com](http://www.cognizant.com) or follow us on Twitter: Cognizant.



### World Headquarters

500 Frank W. Burr Blvd.  
Teaneck, NJ 07666 USA  
Phone: +1 201 801 0233  
Fax: +1 201 801 0243  
Toll Free: +1 888 937 3277  
Email: [inquiry@cognizant.com](mailto:inquiry@cognizant.com)

### European Headquarters

1 Kingdom Street  
Paddington Central  
London W2 6BD  
Phone: +44 (0) 20 7297 7600  
Fax: +44 (0) 20 7121 0102  
Email: [infouk@cognizant.com](mailto:infouk@cognizant.com)

### India Operations Headquarters

#5/535, Old Mahabalipuram Road  
Okkiyam Pettai, Thoraipakkam  
Chennai, 600 096 India  
Phone: +91 (0) 44 4209 6000  
Fax: +91 (0) 44 4209 6060  
Email: [inquiryindia@cognizant.com](mailto:inquiryindia@cognizant.com)