8-2010

Taming the Social Network Jungle: From Web 2.0 to Social Media

Rolf T. Wigand
University of Arkansas at Little Rock, rtwigand@ualr.edu

Jerry D. Wood
University of Arkansas at Little Rock, jdwood@ualr.edu

Dinah M. Mande
University of Arkansas at Little Rock, dmmande@ualr.edu

Follow this and additional works at: http://aisel.aisnet.org/amcis2010

Taming the Social Network Jungle:

From Web 2.0 to Social Media

Rolf T. Wigand
rtwigand@ualr.edu

Jerry D. Wood
jdwood@ualr.edu

Dinah M. Mande
dmmande@ualr.edu
University of Arkansas at Little Rock
Department of Information Science
Little Rock, Arkansas, USA

ABSTRACT

The authors explore various Web 2.0, social media as well as communication networks developments. Web 2.0 is defined and viewed as a paradigm shift. They examine how the vast amount and huge variety of information on the Web is attempted to be organized, sorted, ordered, tagged and classified. The nature and role of social networking sites are addressed, especially asking how businesses might find a role here. Moreover, the authors ask how one might reach and connect with Web 2.0 customers and what strategy businesses might pursue. Online shopping communities are explored and opportunities for retailers are identified. Lastly, questions and issues are raised about the implementation of Web 2.0 and the bottom line, i.e. an attempt to see what some businesses are doing in this context and how they embrace Web 2.0 technologies and applications. Conclusions highlighting four predictions for the future of social networking and social media are offered.

KEYWORDS

Social Networking, Social Media, Web 2.0, Facebook

INTRODUCTION

In recent years, social networking has become very popular. Websites such as Facebook have seen unprecedented growth among users representing a highly sought after demographic segment of the population. With this new media's popularity, businesses are trying hard to develop and implement marketing campaigns to attract potential buyers of their wares. In this research, the authors investigate social media and how businesses are attempting to use Web 2.0 to successfully market their products.

Within the ever-changing social networking world, data from just 2 years ago could be considered obsolete. With this in mind, this study was conducted by using timely literature reviews, reports and available statistics of the most recent sources of social networking data which primarily were gathered from: reputable websites, books, and relevant news articles and research companies' reports. However, for background purposes, some older literature was utilized thus providing a well-rounded picture of this rapidly evolving area of research.

Over the last few years several books have been published that address in part or indirectly aspects of Web 2.0 and social networking developments and have influenced our thinking along those lines. First of all, one must recognize Chris Anderson's *The Long Tail*, with the author recognizing that the future of business and culture is not in big hits

(the high-volume head of the traditional demand and diffusion curve) as in the past, but the endless long tail of that same curve with demand being splintered into ever more media outlets. Yochai Benkler's *The Wealth of Networks: How Social Production Transforms Markets and Freedom* addresses the restructuring and reconfiguration of power and knowledge derived from the tightly knit and complex interactions among as well as impact of business, public, nonprofit, educational and amateur media producers. Tom Malone's *The Future of Work* addresses how such changes alter and reshape the management needs and practices of major corporations. Henry Jenkin's *Convergence Culture: Where Old and New Media Collide* addresses this currently evolving world in which every story, image, sound, brand and relationship play themselves out across an ever-increasing number of media platforms. In this he recognizes that the flow of media content is shaped just as much by decisions made in teenagers' bedrooms as by decisions made in corporate boardrooms. The last book to be mentioned in this context is David Weinberger's *Everything Is Miscellaneous: The Power of the New Disorder*. The author identifies and charts new principles of digital order that are remaking business, education, politics, science, and culture. In doing so he views these developments within a chart of a new world order (or, better, disorder).

The authors of these influential books approach these intertwined topics from very different disciplinary perspectives and, interestingly, most did not know of each other until their respective books appeared. When these books are examined together though, we can recognize an emerging paradigm shift in our understanding of business, political economy, media, culture, and society. This paradigm shift can be viewed under the label of Web 2.0.

Thomas Kuhn (1962) is credited with addressing the notion of paradigm shift in the context of scientific revolution. Although we are certainly not observing a scientific revolution in the context of Web 2.0, but the paradigm, in Kuhn's view, is not simply the currently prevailing theory, but the larger picture, even the entire worldview, in which it exists as well as all of the implications coming with it. It is often this final comprehension, the result of the long process of change, that is understood when the expression *paradigm shift* is used colloquially, i.e. the change of worldview, without reference to the specificities of Kuhn's historical argument.

Web 2.0 is a somewhat misleading term, as it may suggest ideas about a new technology, but what has abruptly changed is something very different: What has drastically changed is everyday as well as business life, simply by being online in some fashion, has become interwoven, meshed, linked and in part enabled by the Internet. More than ever we realize that the media shape and reconfigure society not only through their content, but through their form. Although it is difficult at this stage, maybe even impossible, to provide a precise picture of what this shift looks like and to determine where these developments are precisely headed. Here the authors will address several manifestations of this paradigm shift and demonstrate through examples how these changes are unfolding. An attempt is made to reflect on the implications and impact this may have on companies and society, and how they should position themselves strategically in light of these developments.

With such reshaping and reconfiguration, however, we can observe how the media and tools used in people's interaction and communication that a restructuring and regrouping of their real relations to each other is occurring. Such a shift never is possible without consequences. Along come concerns, of course, about excesses and extreme behaviors (forms of addiction (e.g., Internet gambling, excessive gaming), choosing the Internet as an exclusive

means of communication, etc.), such as when parents are concerned with their children's missing out on *real life*. But then such concerns had arisen with the introduction of any new medium in the past. One only needs to recall parents' concerns about excessive television viewing in the past. Even Socrates envisioned the sad possibility that the sheer practice of writing and scripting may push aside or by-pass the lively exchange of ideas, an early form of disintermediation. Gutenberg's printing presses disseminated not only the idea of freedom of choice, but they enabled the technical free choice of ideas. Similar concerns were also raised when silence permeated in 17th century English coffee houses as the visitor mostly heard the rustling of newspapers instead of the twitter of patrons. Here too concerns about *real and actual life* were expressed. This cycle repeated itself with the introduction of the telephone as well. It seems that that what is happening on the Internet, with social networking and with Web 2.0 trends is not any less real.

1.7 billion people utilize the Internet (Internet World Stats, 2010). In that sense the behavior of embracing Web 2.0 capabilities has become a mass phenomenon. Some skeptics argue that if of 1000 users of an interactive website merely one is making a contribution to the site's content that this is not very exciting and meaningful. Yet if this very same site enjoys overall several millions of users, this, in turn, does result in thousands of authors (*The Long Tail* economics phenomenon).

The remainder of this paper presents a Web 2.0 overview, addresses current social network uses and developments and examines how to reach and connect with Web 2.0 customers and what businesses can do in this area. Lastly, we recognize the importance of online shopping communities in a Web 2.0 world and the authors present their conclusions, including the identification of four major trends for the future of social networking, social media and Web 2.0.

WHAT IS WEB 2.0?

Although the precise demarcations and delineations of Web 2.0 are still somewhat cloudy, one thing is clear: Web 2.0 is not a creation by business or the economy, it is being created by millions of users. Web 2.0 is a participatory medium. We may loosely understand Web 2.0 as the second or new Internet. There is some debate how new Web 2.0 really is. Tim Berners-Lee for one, the founder of the WWW, views Web 2.0 merely as the logical further development. In that sense there is no new software or application with the name of Web 2.0. And yet what we observe with Web 2.0 is a paradigm shift how users use the web, a development that questions everything that has been developed and applied so far. Many agree that Web 2.0 is woven from a fabric of technologies designed to enable collaboration and break down information silos in an effort to aggregate and to publish information. In that sense Web 2.0 is a social phenomenon, not a technology per se. New with the Web 2.0 era is that anyone can explore, join, build or depart any web community and can create and post content onto the Internet without requiring extensive technical know-how. In a nutshell, Web 2.0 is a broad range of websites that encourage interaction and collaborative work. Users do not just consume content, but they create and produce content as well. Obvious examples along this line of thinking are YouTube and the family photo album Flickr. YouTube has enjoyed uploads of many millions of videos within a few short months and functionally has become indeed the *tube of the chip*

culture. When everyone can produce one's own video program, in the long-run, this may become a threat for traditional television (see, e.g., The Future of Television, 2007).

Although there is no hard-and-fast definition of Web 2.0, the concept of Web 2.0 is generally attributed to Tim O'Reilly (2005) coining the phrase in 2004, stating that "One of the key lessons of the Web 2.0 era is this: Users add value …. Therefore, Web 2.0 companies set inclusive defaults for aggregating user data and building value as a side-effect of ordinary use of the application." In general, Web 2.0 is a broad concept subdivided into three anchor points: technology, community and business. The challenge is that Web 2.0 is more than just a set of technologies. It incorporates also attributes with a social dimension including social networks and their impacts, new business models, user-contributed content and user-generated meta-data, relatively open and transparent business processes, increased simplicity in design and features as well as decentralized and participatory products and processes. The three anchor points for Web 2.0 are (Smith, 2006; Wigand, 2006; and others):

- Technology and architecture – consisting of the infrastructure of the Web and the concept of Web platforms. Examples of specific technologies include Ajax, representational state transfer (REST) and Really Simple Syndication (RSS). Technologists tend to gravitate toward this view.
- Community and social — looks at the dynamics around social networks, communities and other personal content publish/share models, wikis and other collaborative content models. Most people tend to gravitate toward this view; hence, there is much Web 2.0 focus on "the architecture of participation."
- Business and process — Web services-enabled business models and mashup (that is, a Web site or Web application that combines content from more than one source)/remix applications. Examples include advertising, subscription models — software as a service (SaaS) — and *long-tail* economics. A well-known specific example is connecting a rental-housing Web site with Google Maps to create a new, more useful service that automatically shows the location of each rental listing. - Of course, business people tend to zero in on this angle.

Politicians, firms and various entrepreneurial forms represent and construct themselves on the Internet within an artificial world. Similarly blogs and Wikipedia help shape Web 2.0. Firms—not just virtual or newly created entrepreneurial firms but the BMWs, Dells and IBMs of the world—ask themselves how traditional Internet-based offers can be integrated with those of Web 2.0 developments. Even though no one at the present time is completely sure of what Web 2.0 fully comprises and exactly how to deploy its elements, it has become clear that the Internet demands evermore powerful networks. In spite of these uncertainties, we may agree that Web 2.0 is a very heterogeneous child, yet we still will have to wait and see what it might look like as an adult.

With Web 3.0 on the horizon, searching the Internet would become more like asking an intelligent guide for improving current search features going beyond the mere display of a catalog of results. Such a guide would become much more valuable than current search engines. Although the idea of Web 3.0 is enticing, it is still years away from implementation.

CURRENT SOCIAL NETWORKING USES AND DEVELOPMENTS

A central component and anchor point of Web 2.0 are communal and social aspects that group, organize and aggregate people, but also business customers. The phenomenal growth of social networking sites has become legend including such sites as Twitter (Blake et al., 2010). The most successful social networking site is Facebook which celebrated its sixth birthday in February 2010. At the time of this writing Facebook is the second most popular Internet site after Google. Facebook boasts over 430 million subscribers as of October 2009 who post over 55 million updates daily. In addition, they share more than 3.5 billion content items with each other (Giles, 2010, p. 2). One should note that 70 percent of its subscribing audience is outside the United States. ComScore estimates that in October 2009 social networking sites enjoyed 800 million visitors (Giles, 2010). Moreover, Nielsen asserts that since February 2009 people have been spending more time on social network sites than on e-mail and this trend is growing (Giles, 2010). The most heaviest social network users are Australian with well over seven hours per day, followed by Britain (six hours plus), Italy (six hours), United States (just under six hours) per day in October 2009, respectively (Giles, 2010). There are of course other social networks and forms thereof such as MySpace, LinkedIn, Twitter, Orkut, QQ, Skyrock, VKontakte1 and Cyworld. A new blog is being created at the rate of one per second day-in and day-out. Web portals such as Edmunds.com and Carspace.com have created their own social networks.

The phenomenal success of YouTube is now legendary and YouTube is today's biggest television station on the planet. YouTube was acquired by Google for $1.6 billion in October 2006. At the time of the acquisition, Google had about 50 million users worldwide, which comes to a purchase price of about $32 a user. Latest ComScore data report that YouTube served 12 billion video views during November 2009, up 137% year over year (*Silicon Business Insider*, 2010). Unique visitors to the site are strong as well, up 32%, resulting in 97.7 million unique visitors per day. About 400 million videos are dished up by YouTube daily (*Compete*, 2010). Since the launch of the *i*Phone 3 GS YouTube's daily mobile uploads have increased 400 % (Slivka, 2009).There are many YouTube videos uploaded each day that are socially and otherwise utterly useless, if not dysfunctional. What is the importance of "flipping butter to the ceiling," to see if the butter sticks or not or what is the redeeming social value of the instructional video on how to pick locks by the Boston Lockpick Society (Open Organization of Lock Pickers)? On the other hand, there are many videos that are funny and entertaining of course as well as videos that are indeed informative, helpful and socially relevant, if not even taking on a democratization role within society. One citizen produced video depicting the handling of a suspect by Los Angeles police on a Hollywood street on August 11, 2006 yielded over 200,000 views. Under the search term 'police brutality' one finds over 13,000 (April 26, 2010) amateur videos, not just from the U.S. but also Egypt and Hungary. Videos are being used as evidence in police reviews.

HOW TO REACH AND CONNECT WITH WEB 2.0 CUSTOMERS: WHAT IS A BUSINESS TO DO?

Throughout the economy these Web 2.0 developments are creating new modes of connecting, transaction, innovation and production. Google has embraced these developments and become a digital conglomerate with a capitalization of $150 billion by entering not just the media industry, but retail, software, networking, telephony,

payment systems, hardware and soon television. The underlying technologies enable also forms of mass collaboration to design, conceive and distribute products in innovative ways.

Individuals post blogs and other messages on the Internet are enjoying an increasingly popular way for sharing information among people about products. In turn, they offer companies a treasure of voluntary and non-intrusive consumer feedback without having to administer cumbersome, expensive and slow surveys. Technorati tracks about 120 million blogs. In July 2009 alone, there were 1.6 million blog postings daily, or 18.6 per second. Two blogs were created each second of each day (Smith, 2009).

Yet despite these intriguing developments, what can a company do to embrace Web 2.0 developments? Visitors to video-sharing websites, for example, have demonstrated that they watch almost anything, from flipping butter to the ceiling, cats chasing mice and people singing in the shower. This may be fine and also funny, but would people tune in to see and hear things about Coca-Cola or Hellmann's mayonnaise? Although the authors cannot provide generalized prescriptions to answer these questions, the following examples may suggest approaches and some solutions.

Advertisers and marketers producing content for the Web, e.g., on February 4, 2007 Super Bowl viewers watched a Frito Lay chips advertisement created and chosen by its customers on the Internet.   Marketers are more and more linking with a portal rather than creating their own respective site. This suggests a recognition that drawing traffic to a stand-alone site can be demanding and challenging, especially with online shopping communities. Beer producer Anheuser-Busch was disappointed with numbers of users visiting its launched entertainment Web site Bud.TV. Yet when Procter & Gamble started Capessa, a website for women to discuss topics such as parenting, it joined with Yahoo's Health section. Portals just like Yahoo can enjoy deals with advertisers delivering access to well-produced content but also assured advertising revenue. The latter should be especially attractive to Yahoo, as it struggles with considerable competition from Google and similar competitors.

One intriguing application of social network uses among many others is the practice and development of online shopping communities. This is described in the next section.

ONLINE SHOPPING COMMUNITIES

Increasingly retailers and designers (including Nordstrom, Gap, Lisa Klein, Ron Herman and online discounter Bluefly.com) are trying to tap into "social shopping" sites where ardent shoppers gather to chat and exchange ideas. Social shopping sites give shopaholics the opportunity to gather and swap ideas about choices, prices, looks, quality and the like. Table 2 shows various features and capabilities these shopping sites offer. Many of these sites do not (yet?) give retailers the opportunity to pay for prominent placement:

Table 2: Social Shopping Sites: Web 2.0 Features and User Features

Website Name	Paid Retailer Presence	User Features
Climpse.com	no	Facebook users can create, upload and share shopping lists of products, including professionally shot pictures and information, from over 100 retailers and brands.
Kaboodle.com	no	Users can discover new things from people with similar taste and style. Recommend, share, discover and discuss favorite products and stores; create wish lists and shopping lists.
Shopstyle.com	yes	Users can create "stylebook" pages featuring items they desire and covet, recently purchased and exchange comments and recommendations on products.
Stylehive.com	yes	Users can create "hives", i.e. pages, lists, featuring items they like; the site allows users to "follow" a shopper whose style they like and receive alerts whenever he/she adds new products on his/her respective page.
Stylediary.net	no	Users mostly post photos of themselves wearing their favorite outfits, dresses and items form their own wardrobe.
Thisnext.com	no	Users recommend or pan clothing, outfits, accessories or home items on pages they create.

Note: Social shopping sites typically receive about 5 percent of each purchase occurring as a result of a click-through from the site.

For many users these sites have been perceived as a true and rich source of creativity and support. The essential feature of a social networking site is exhibited when the site offers the highly desirable and handy feature to "follow" a fellow shopper whose style or person, maybe even a celebrity, is admired by the focal shopper. This gives retailers the potential to engage in a dialogue with these social shopping communities. Whenever the shopper raves about the dress she just purchased, linked fellow shoppers receive an alert offering this shopper the opportunity to check out this latest acquisition. Embedded in this feature is the capability to launch products, to initiate trends, new styles, etc. This feature potentially can be carried out subtly and without intruding on the delicate sensitivities with regard to reaching the potential shop through other, more traditional and intrusive forms of marketing and advertising. Unquestionably, the retailer's presence blurs the line between sheer information shopping chats and having a retailer push a particular item. Here again we encounter the delicate demarcation line between plain old advertising and independent social shopping chats, as social shopping is only appealing if people perceive the site they are using to have legitimacy. Thus the decision to offer retailers a paid presence of social shopping sites is a complicated, nested and delicate decision. Not all of these sites are likely to survive in the long-run, as some of these efforts and features may fizzle with shoppers.

SUMMARY AND CONCLUSION

This contribution explored various Web 2.0 and social networking developments. The authors present a definition of Web 2.0, view this development as a paradigm shift and examine how the vast amount and huge variety of information on the Web is attempted to be organized, sorted, ordered, tagged and classified. The nature and role of social networking sites is addressed, especially asking how businesses might find a role here. Moreover, the authors ask how one might reach and connect with Web 2.0 customers and what strategy businesses might pursue. Online shopping communities are explored and some opportunities for retailers are identified. Lastly, questions and issues are raised with regard to the implementation of Web 2.0, the bottom line and how they embrace Web 2.0 technologies and applications.

When reflecting on these Web 2.0 developments and the issues addressed here, the authors believe that what we observe is not the emergence of a new theory or fundamental concept within a theory, but it may well be described as a shift in how we view the web. This paradigm shift forces us to take a new look recognizing innovative opportunities and challenges while it crosses a number of dimensions, including our communication patterns, the media, the Web, organizations, economics, society and culture.

Today the WWW serves no longer the mere acquisition of information or for the sheer purpose of communication. Users often have taken on the role of being the producer of their own content. Moreover, users tend to react interactively to the content produced by other users. Their participation in social networks as well as blogs, formed via Web 2.0 applications, has become common practice. Users leave Facebook windows open all day such that they may receive alerts from these and other sites. More than 80 percent of the time U. S. adults spend on the Internet, they are involved in another activity at the same time.

Today's Internet users are more active, online longer, and their usage behavior is changing from that of a consumer to a producer. They discuss, debate and argue on Weblogs and distribute information faster, more comprehensively and more personalized via the RSS (Real Simple Syndication) format than via the classical and traditional media from the past. Users are networked million-fold via online offers such as Windows Live Spaces with such services as Mail, Spaces, Instant Messaging or Search as expressions of Web 2.0 in order to exchange pictures, videos and text. Services offered within the Web 2.0 framework are now part of the evolutionary history of the WWW. Aggregating services have formed that pool all new messages and updates for individuals' various social networking sites. This implies that if a firm today wants to be active on the Internet, it has no choice but to find its appropriate role via Web 2.0. Most major firms, including Adidas, BMW, IBM, Google and many others, are positioning themselves to find their strategic place and fit within these developments.

Within these developments we can recognize four broad trends for the future of social networking, social media and Web 2.0 (Wigand, 2010; Gartner, 2010, *CIO Zone*, 2010, and others):

1. The role of e-mail – Who needs e-mail?

   There are some indications that the role of e-mail as the primary vehicle for interpersonal communication will be replaced in time by social networking services. Gartner (2010) predicts that by 2014 20 percent of business users will replace e-mail in this way.

2. Most social media are likely to fail, at least initially.

   Information technology (IT) organizations have provided technology platforms in the past for such applications as e-mail, instant messaging, and Web conferencing rather than attempting to deliver a social solution. IT organizations are predicted to struggle with shifting from providing a platform to delivering a solution. The efforts, Gartner (2010) predicts, are to result in over 70 percent failure rate in IT-driven social media initiatives. Firms will have to develop new skill sets permitting them to design and to deliver social media while recognizing that these social media initiatives must be business- and not IT-driven.

3. The role and influence of the smart phone.

   Three billion phones world-wide are mainly used for the purpose of providing communication and collaboration (Gartner, 2010; *CIO Zone*, 2010). More and more users utilize these devices as collaborative tools (Wigand, 2010). Gartner (2010) even states, "As more and more organizations consider replacing desk phones with cell phones, they may wish to anchor their collaboration tools also on the cell phone."

4. Recognizing social networking and social media as an untapped resource of insight.

   Traditional social network analysis using surveys may yield inaccurate data as participants in those networks may be reluctant to provide such information. When automated tools are used, however, users may resent knowing that some software is indeed analyzing their behavior (Wigand, 2010; Gartner, 2010). Thus, and when coupled with concerns of privacy and trust, it is likely that social network analysis will remain as an untapped resource potentially rich in various undiscovered insights.

In some ways, we may argue that these developments are just another beginning as the waves of IT cost performance inexorably continue. This is expected to impact interactive applications in the living room and the office alike, and has already found parallel manifestations in the mobile communications area, resulting in many subsequent development and evolutionary stages.

These advances imply that those who choose to participate and help shape the Internet, have no choice but to keep in step with these developments. The challenges for firms and users will be to blend, merge and consolidate these developments into an integrated and comprehensive concept such that users enjoy a best possible experience.

REFERENCES

Anderson, C. (2006) *The Long Tail*. New York: Hyperion

Benkler, Y. (2006). *The Wealth of Networks: How Social Production Transforms Markets and Freedom*. New Haven, CT and London: Yale University Press.

Blake, B., Agarwal, N., Wigand, R. T., and Wood, J. D. (2010). Twitter Quo Vadis: Is Twitter Bitter or Are Tweets Sweet? *Proceedings of the Seventh International Conference on Information Technology: New Generations (ITNG 2010)*, (Las Vegas, NV), April 12-14, 2010, pp. 1257-1260.

Compete, Inc. (2010). Site Profile for YouTube.com for January, 2010. *Compete* (http://siteanalytics.compete.com/youtube.com/, last accessed on April 25, 2010).

Compete, Inc. (2007). *Attention 200 (A Report)*. Boston, MA: Compete, Inc.

The Future of Television: What's On Next? (2007). *The Economist*, February 10, 2007, 65.

Gartner. (2010). Cited in Eggebrecht, Michael. *Five Predictions for the Future of Social Media*. CIO Zone, February 2, 2010. (URL: HTTP://www.ciozone.com/index.php/Social-Networking/Five-Predictions-For-The-Future-of-Social-Media.html, last accessed on April 25, 2010).

Giles, M. (2010). A World of connections: A Special Report on Social Networking. *The Economist*, (January 30), 1, 3-14.

Internet World Stats. (2010). (http://www.internetworldstats.com/stats.htm, last accessed on April 25 2010).

Jenkins, H. (2006). *Convergence Culture: Where Old and New Media Collide*. New York: New York University Press.

Kuhn, T. S. (1962). *The Structure of Scientific Revolution* (3rd Ed.). Chicago: University of Chicago Press.

Malone, T. W. (2004). *The Future of Work*. Boston, MA: Harvard Business School Press.

O'Reilly, T. (2005) What is Web 2.0? (http://oreillynet.com/pub/a/oreilly/tim/news/2005/09/30/what-is-web-20.html?page=2, last accessed on April 25, 2010).

Silicon Business Insider. (2010). YouTube Growth Chart. January 10, 2010. *Silicon Business Insider*, January 10, 2010 (http://www.strangelove.com/blog/2010/01/youtube-growth-chart/, last accessed on April 25, 2010).

Slivka, E. (2009). YouTube Daily Mobile Uploads Have Increased 400% Since Launch of *i*Phone 3GS. *MacRumors*, June 25, 2009 (http://www.macrumors.com/2009/06/25/youtube-daily-mobile-uploads-have-increased-400-since-launch-of-iphone-3gs/, (last accessed on April 25, 2010).

Smith, D. M. (2006). Web 2.0: Structuring the Discussion. *Gartner Research*.

Smith, T. (2009). Editor's Note: Bloatosphere. *InformationWeek*, August, 2009 (http://www.informationweek.com/newsletters/daily/showArticle.jhtml?articleID=191900571, last accessed April 25, 2010).

Dr. Strangelove. (2010). Total Global Video Uploading: Statistics. *Watching YouTube*, January 23, 2009 (http://www.strangelove.com/blog/2009/01/total-global-video-uploading-stats/, last accessed on April 25, 2010).

Weinberger, D. (2007). *Everything Is Miscellaneous: The Power of the New Digital Disorder*. New York: Times Books.

Wigand, R. T. (2006). The Long Road toward Evolving Internet Business Models: Long-tail Economics, Mass Participation and Social Value Networks. Presentation to the Seminar, "Business Model Innovation Trapped between Theory and Practice," November 27, 2006, Technical University Delft, Delft, The Netherlands.

Wigand, R. T. (2010). Taming the Social Network Jungle. Presentation to the Seminar Series of the Center for Translational Neuroscience, February 23, 2010, University of Arkansas for Medical Sciences, Little Rock, Arkansas.