



Institute of Internal Auditors

















The Impact of Social Media on Corporate
Information Security

9 November, 2010

Agenda

- ▶ What Constitutes Social Media?
- ▶ Social Media by the Numbers
- ▶ Current State of Social Media Adoption
- ▶ Impact on Corporate Information Security
- ▶ How are other organizations dealing with the risk?
- ▶ Questions

What Constitutes Social Media?

	Definition and Overview	Examples
Blogs	<ul style="list-style-type: none"> ▶ Blogs are regular entries created by authors to present typically an opinion, an educational piece, or a description of events. Many blogs contain graphics, videos, and links to other articles. ▶ The majority of blogs cater to a specific interest group (i.e. art, technology, sports team, etc). ▶ Currently there are over 112 million blogs registered. ▶ More than 12% of Fortune 500 companies maintain external corporate blogs. ▶ Companies use blogs as a tool to build relationships with customers, or share knowledge internally. 	   
Social Networks	<ul style="list-style-type: none"> ▶ Some times called Microblogging - A type of social media similar to blogs but limited by bit size. ▶ Society is trending away from receiving news and information that is 'pushed' to them. Technology now allows for consumers to pull the content that they desire to consume in a hyper-efficient manner. ▶ Some internet communication is becoming even more bit-sized. ▶ Twitter is a popular social medium that allows messages of only 140 characters. 	   
Forums / Message Boards	<ul style="list-style-type: none"> ▶ This type of media consists of communities made up of people with similar interest (i.e. sports team, musician, automobile, geographic area) that allow for people to post their thoughts for others in the community to read and respond to. ▶ Forums / message boards can be used to hold discussions, post inquiries, and share relevant content. They can be viewed as a support group. ▶ A large percentage of forums / message boards are niche communities with high user involvement. 	   
Video / Picture	<ul style="list-style-type: none"> ▶ This media type provides a channel for users to share user generated content (UGC) with others including video, pictures, presentations. ▶ Corporations use sites like slideshare.com to aid in perception of company as knowledge leader. ▶ Youtube.com currently hosts over 40% of all videos viewed online. As of January 2009, 6 billion videos were viewed on Youtube. 	   

Social Media by the Numbers – Did You Know?

facebook

- ▶ Over 600 million active users (54% growth from 2009)
- ▶ More than 700 billion minutes spent on Facebook monthly
- ▶ More than 60 million status updates each day
- ▶ More than 20 million users become fans of brand pages each day
- ▶ More than 3 billion photos uploaded monthly
- ▶ More than 5 billion pieces of content shared weekly
- ▶ Over 70% of Facebook users are outside the United States
- ▶ Over 150 million active users access Facebook through mobile devices



- ▶ Over 350 million people globally read blogs
- ▶ Approximately 80 million blog readers in the United States each month
- ▶ 4 out of 5 bloggers are writing about brands online
- ▶ 12% of bloggers are corporate bloggers
- ▶ Bloggers spent 3.5 more hours on the internet than watching TV
- ▶ Bloggers are becoming a trusted source of information for consumers (influential blogs)
- ▶ 1 out of 3 bloggers have been approached by a brand representative for sponsored posts

twitter

- ▶ Over 106 million users
- ▶ 20% of Twitter conversations are about brands, products, services
- ▶ Fastest growing social network at 1,382% year over year
- ▶ Averages 55 million conversations daily
- ▶ Only 20% of users come via Twitter.com, the rest through mobile devices and third-party applications (network effect)
- ▶ Approximately 5% of users account for 75% of all activity (influencers)



- ▶ Over 1 trillion unique web pages in Google's index
- ▶ Over 31 billion Google searches monthly
- ▶ 684,000,000 visitors to Wikipedia last year
- ▶ 14 billion videos watched online monthly by online Americans
- ▶ 72% of American consumers are searching online
- ▶ 91% of journalists use search engines for research

Social media is a global phenomenon that continues to shift consumer attention and behavior from traditional media

Sources: Facebook, Technorati, Twitter, Nielsen, Comscore, Compete

The Current State of Social Networking Adoption

Consumers

- ▶ Social networking now eats up twice as much of our online time as any other activity.

Rank	SubCategory	Share of Time June 2010	Share of Time June 2009	% Change in Share of Time
1	Social Networks	22.7%	15.8%	43%
2	Online Games	10.2%	9.3%	10%
3	E-mail	8.3%	11.5%	-28%
4	Portals	4.4%	5.5%	-19%
5	Instant Messaging	4.0%	4.7%	-15%
6	Videos/Movies	3.9%	3.5%	12%
7	Search	3.5%	3.4%	1%
8	Software Manufacturers	3.3%	3.3%	-0%
9	Multi-category Entertainment	2.8%	3.0%	-7%
10	Classifieds/Auctions	2.7%	2.7%	-2%
	Other	34.3%	37.3%	-8%

Source: The Nielsen Company

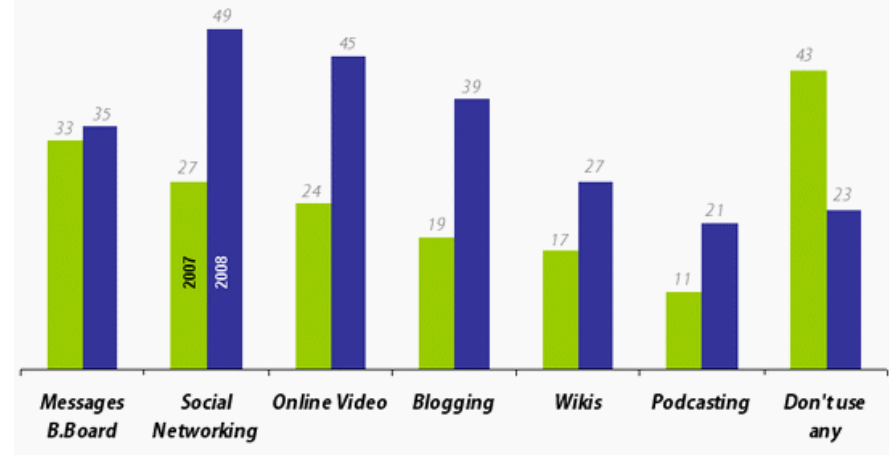
Social Networking participation is one of the most popular activities online, and is widespread among all age groups

* Source: Nielsen Online, 2010

The Current State of Social Networking Adoption Businesses

- Social Media adoption among big brands has steadily grown, with approximately 15% of the Fortune 500 blogging.
- Even greater, 77% of Inc. 500 companies have joined the social web and engaged, enough to be called socially active.
- 46% of the Fortune 100 do not have a Twitter account, and 43% do not have a Facebook page.
- Only 17% of the Fortune 100 have a social media a strategy that incorporates all 3 major social platforms (Twitter, Facebook, Blogging).
- Ways Fortune 100 brands utilize Twitter:
 - 94% use it for news/announcements
 - 67% for customer service
 - 57% for deals and promotions.
 - 11% use it for HR and recruitment

Which of the following types of social media does your company currently use?



There exist thousands of social media channels, each with a different value proposition. Initially, brands have focused more on broader platforms with highly engaged consumers, like Facebook, Twitter, YouTube, or MySpace. However, many are also discovering the power of niche member communities, wikis and begun to engage with consumers there as well.

Businesses are seizing the opportunities in Social Networking to expand their brand, reach new customers, and recruit top talent.

** Source: University of Massachusetts Center for Marketing Research, EngagementDB Report*

Impact on Corporate Information Security

- ▶ Information Leakage
 - ▶ Upcoming or current business trips
 - ▶ Venting about the workplace (long hours, HR actions, etc)
 - ▶ Client or Patient information being shared could lead to regulatory concerns and/or lawsuits
- ▶ Targeted Attacks
 - ▶ Phishing via Social Networking
 - ▶ Downloaded files containing viruses/malware/etc
 - ▶ Access to files stored outside company's IT borders (Google Docs, Sharepoint, PMRx)
- ▶ Social engineering
- ▶ Misuse of social applications
- ▶ Brand and reputation damage

Impact on Corporate Information Security

Information Leakage



[HealthyRandy](#) **LEAKED**: New Pictures And Details Of 's iPad-Killer, The Courier <http://bit.ly/bsSUye> ~ More of a bruiser instead of a 'killer'.

26 minutes ago from web



[ingresosnuevos](#) **Leaked** information hint at Microsoft's mobile future <http://bit.ly/ajXMZh>

33 minutes ago from twitterfeed



[Djbrew07](#) Listening to some of the **leaked** tracks to ushers new album on youtube.

about 3 hours ago from web

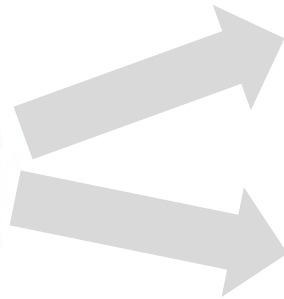


[dsawyer](#): Kickass concept art **leaked** - new [REDACTED] project <http://trim.li/nk/9zm> #steampunk


3 days ago from Flock · [Reply](#) · [View Tweet](#)


Impact on Corporate Information Security


Information Leakage




At #socialsearch #littlehelpfromfriends ★
panel. (@ SXSU / ACC - Ballroom A w/
@wesley83 @bryanperson)
<http://4sq.com/8L5bBM>
11:01 AM Mar 15th via foursquare + Reply ↪ Retweet

 **MeanRachel**
Rachel Farris



PLEASE ROB ME 

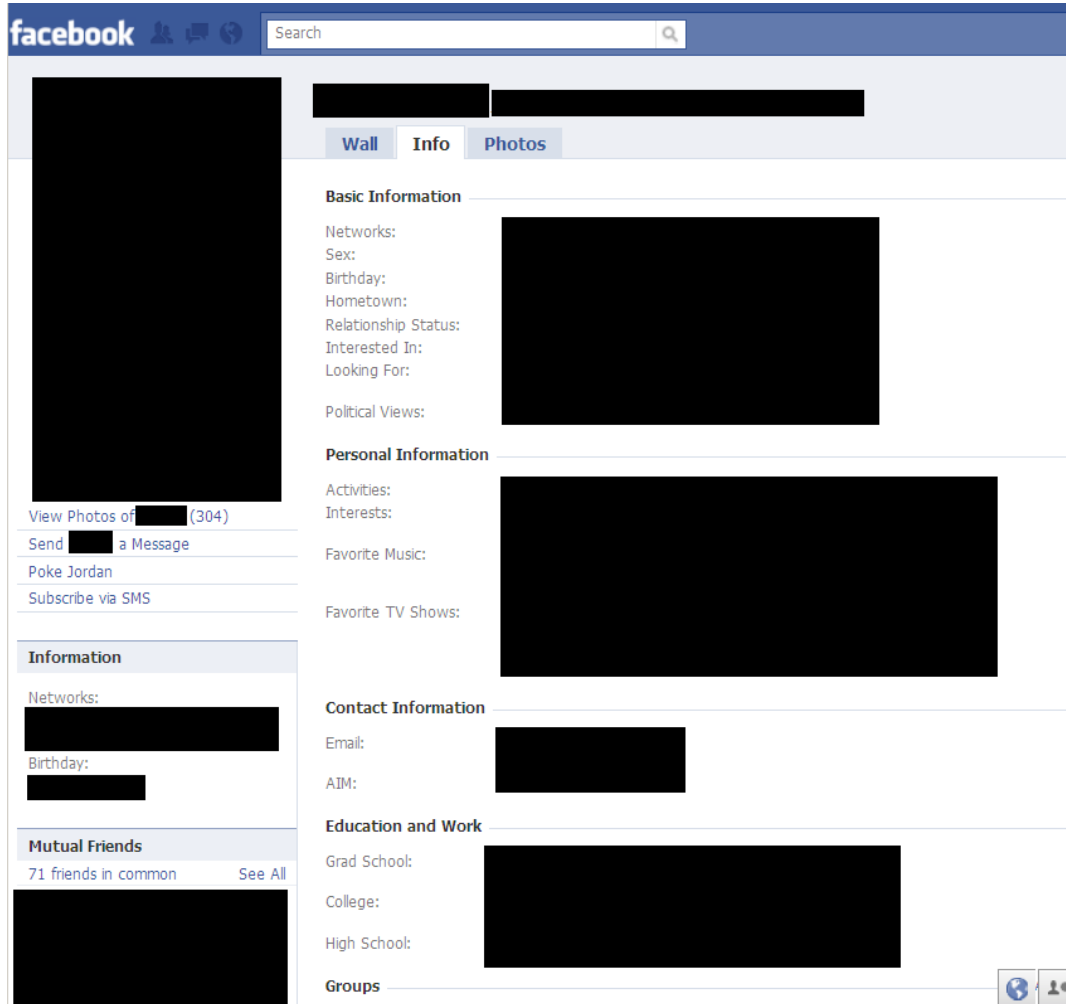
Listing all those empty homes out there 

Check out the same results on [Twitter search](#).

Location-based social sharing brings with it new risks

Impact on Corporate Information Security

Information Leakage



Impact on Corporate Information Security

Information Leakage

- ▶ A P2P search for the top ten healthcare companies in the US identified hundreds of documents revealing sensitive information on tens of thousands of patients, including:
 - ▶ A spreadsheet from an AIDS clinic with 232 client names, including Social Security numbers, addresses and birthdates.
 - ▶ Databases for a hospital system that contained detailed information on more than 20,000 patients, including Social Security numbers, contact details, and insurance records, along with diagnosis information.
 - ▶ a 1,718-page document from a medical testing laboratory containing patient Social Security numbers, insurance information, and treatment codes for thousands of patients.

* Source: SCMagazineUS "Medical Leakage Rampant on P2P networks", Feb 11, 2009 – a study by Dartmouth University and Triversa

How are other organizations dealing with the risk?

Initial Reactions

- ▶ Companies face an initial and critical decision – Block or Not?
- ▶ Information Security Professionals need to balance significant benefits of Social Networks against risks of data leakage and lost productivity.
- ▶ Through use of mobile devices, wireless cards and home networks, individuals will find a way to connect.
- ▶ Many companies resort to an increase in policies, corporate use guidelines, and employee education – Microsoft’s Security Policy: “Be Smart”
- ▶ There are two critical tasks:
 - ▶ Developing social media usage policies and procedures (<http://socialmediagovernance.com/policies.php>)
 - ▶ Providing education and training to employees

How are other organizations dealing with the risk?

Social Media Policy Checklist

- Policy Owner
- Policy Participants
- Audience Locations
- Employee Locations
- Who Represents Org in Social Media
- Utilities Covered (e.g., Facebook, Internal Apps)
- Tools Provided (e.g., Filtinbox)
- Governance Processes
- Opportunity v. Risk
- Desired Behaviors
- Scope: Personal Use
- Benefits Desired
- Public or Private Publishing
- Tone
- Disclosure on Personal Properties
- Use of Trademarks
- Use of Confidential or Proprietary Information
- Speaking About Your Org
- Privacy
- Press Contacts
- Special Consideration for Selected Utilities

Social Media Policy Database – <http://www.socialmediagovernance.com/policies.php>

...Sample List, non-exhaustive

How are other organizations dealing with the risk?

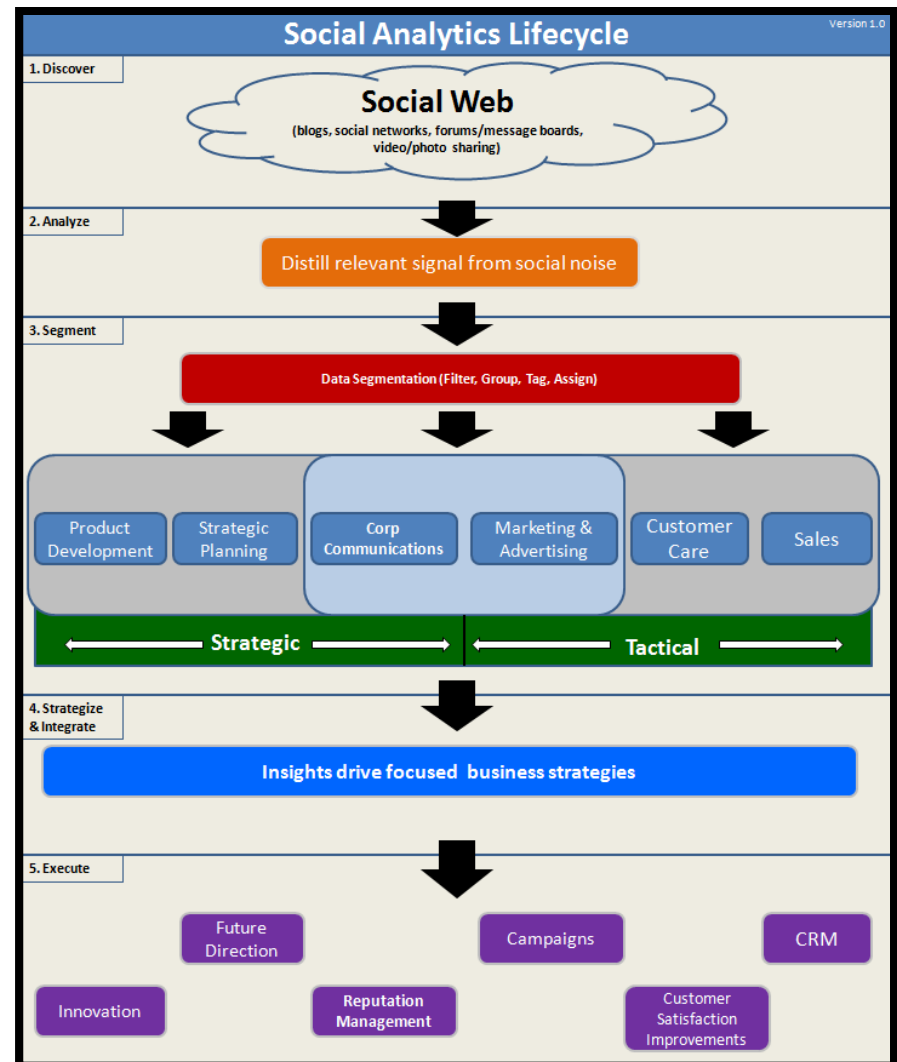
Longer-term solutions

- ▶ Creating and communicating a social media usage strategy across the company (including objectives and measurement plan)
- ▶ Developing monitoring programs to continuously provide coverage and real-time data/insights (both internal and external) about the company, products & services, key executives, competitors and employees
 - ▶ Powerful and in-depth research activity
 - ▶ Allows companies to listen to real-time conversations that occur across the social web (blogs, forums, social networks, video sharing sites, photo sharing sites, news sites).
 - ▶ Brands should be constantly monitoring the web to respond to crises, follow trends, identify unmet customer needs, understand consumer sentiment and keep track of competitors.
- ▶ Highly evolved companies combine blocking, policies and monitoring in their Social Networking Strategy

Monitoring Processes

Monitoring/listening programs start by discovering relevant social data, synthesizing it into findings, and shepherding critical information internally to key company functional areas.

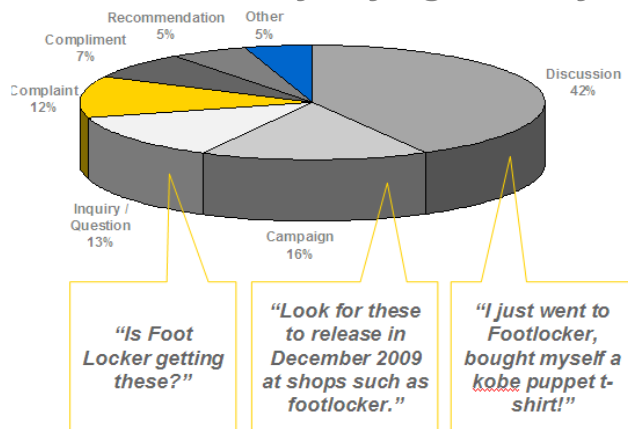
- 1. Discover** – Harvest relevant social data
- 2. Analyze** – Separate signal from noise
- 3. Segment** – Segment social data by business function and/or defined categories
- 4. Strategize and integrate** – Make listening outputs a regular input that informs the strategic planning process
- 5. Execute** – Informed action based on insights from strategic listening



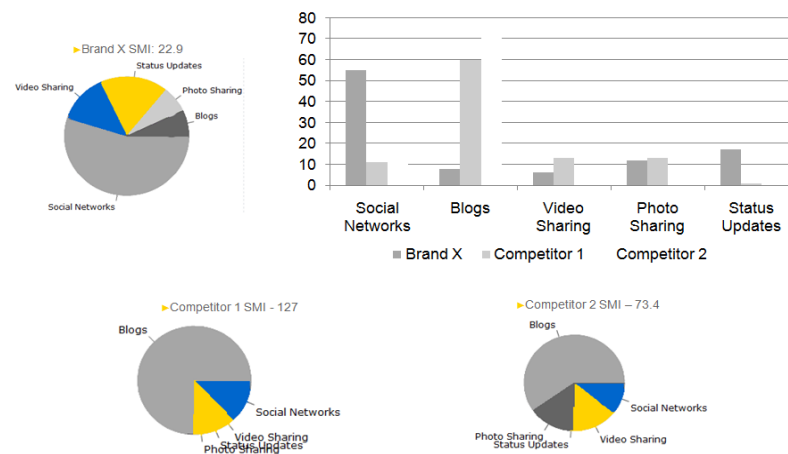
Source: kenburbary.com

Example Results of a Social Media Assessment

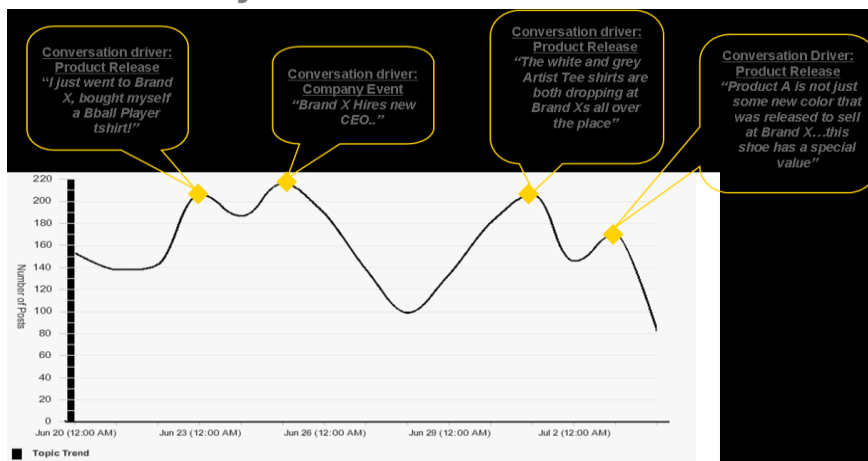
What are they saying about you?



Share of online voice vs. Competitors



How do you increase the volume?



- ▶ 93% of online consumers expect companies to have a social media presence
- ▶ 90% of consumers say peer recommendations are the most credible form of advertising
- ▶ Online Listening captures context and emotion better than traditional methods, yielding an accurate understanding of the marketplace

Questions?

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