Web 2.0 in the Workforce

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Abstract

The purpose of this paper is to describe how to implement a policy to regulate usage of Web 2.0 in the workforce. Included in this paper will be the company background, history and sites of Web 2.0, consequences of not having a policy, how to spot Web 2.0 applications, factors of Web 2.0, potential threats, a description of the policy, training needed, cost of training and an assessment plan.

Company Background

The Softball Production Group is a mock company, used for example purposes only in this paper.

The Softball Production Group is a marketing company that was established in 1990. The Softball Production Group has 300 regular employees and 50 temporary employees. The purpose of this company is to make and sell softball equipment. In 2004, the revenue was $8.9 million, but in 2009 the revenue dropped to $4.5 million.

Currently, the company markets the equipment by phone and employees have limited internet usages; the internet usage is mainly for research. Also, the company has a web site of www.softballproductiongroup.com that helps to market the products, but this web site alone is not enough in today's market. The Softball Production Group is looking to implement Web 2.0 to help the marketing team be able to network and collaborate the products they have to offer.

History

What is Web 2.0? If you ask any internet expert you will receive a variety of answers. Web 2.0 can mean different things to different people. There are several definitions of Web 2.0 that are on the internet:

- Web 2.0 = the web as a platform
- Web 2.0 = the underlying philosophy of relinquishing control
- Web 2.0 = globalization ("making global information available in local, social contexts and giving people the flexibility to find, organize, share and create information in a locally meaningful fashion that is globally accessible")
- Web 2.0 = an attitude not a technology
- Web 2.0 = when data, interface and metadata no longer need to go hand in hand
- Web 2.0 = action-at-a-distance interactions and ad hoc integration
- Web 2.0 = power and control via API (Applications Programming Interface)
- Web 2.0 = giving up control and setting the data free

[1]

Some definitions may be contradictory, but each of these definitions contains certain characteristics of Web 2.0. Web 2.0 is a category of new Internet tools and technologies created around the idea that the people who consume media, access the internet, and use the web should not passively absorb what is available; rather they should be active contributors, helping to customize media and technology for their own purpose, as well as those of their communities.

The key characteristics of Web 2.0 are:

- Web-based applications can be accessed from anywhere
- Simple applications solve specific problems
- Values lies in content, not the software used to display content
- Data can be readily shared
- Distribution is bottom-up, not top-down
- Employees and customers can access and use tools on their own
- Social tools encourage people to create, collaborate, edit, categorize, exchange and promote information
- Network effects are encouraged; the greater the number of people who contribute, the better the content gets
  [2]

Web 2.0 is not just about the web, it is also about collaborative innovation and online-offline sharing. The way Web 2.0 came about was from a conference between Timothy O'Reilly and Media Live International. They did a brainstorming session in 2004, so Web 2.0 is still fairly new. The biggest feature of Web 2.0 is the rise of blogging; one of the features that made a big difference is having Really Simple Syndication (RSS). RSS is a way to easily distribute a list of headlines, update notices and sometimes content to a wide number of people. RSS works by having the website author maintain a list of notifications on their website in a standard way. This list of notifications is called an RSS Feed. People who are interested in finding out the latest headlines or changes can check this list. Special computer programs called RSS aggregators have been developed that automatically access the RSS feeds of websites you care about on your behalf and organize the results for you. (RSS feeds and aggregators are also sometimes called RSS Channels and RSS Readers.) [3]

Timothy O'Reilly is the founder and CEO of O'Reilly Media. He is largely responsible for the Web 2.0 moniker and initial concept. Here is a summarization of Web 2.0 from Timothy O'Reilly "Web 2.0 is the business revolution in the computer industry caused by the move to the internet as a platform and an attempt to understand the rules for success on that new platform. Chief among those rules is this: Build applications that harness network effects to get better, the more that people use them".
[4]

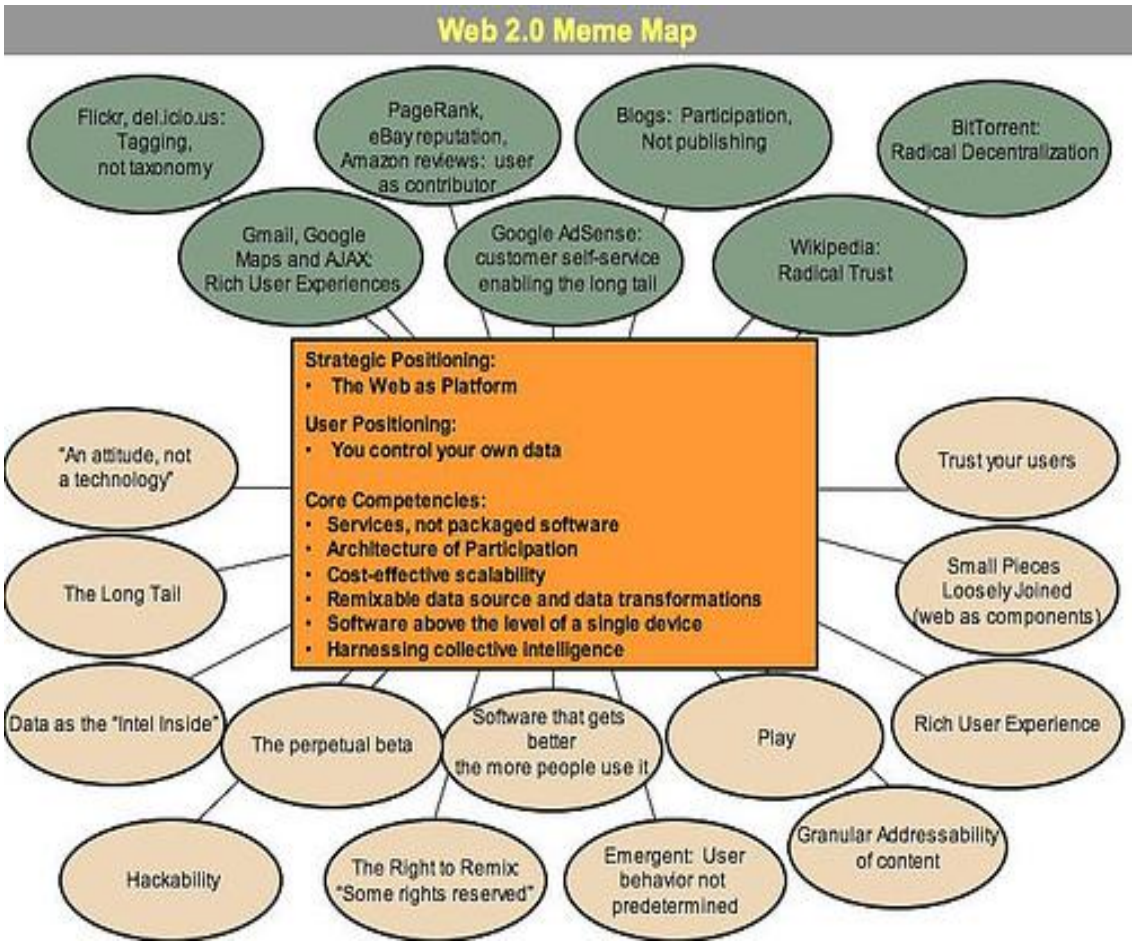

Figure 1. Meme map of Web 2.0
[5]

Here are some examples of Timothy O'Reilly's descriptions of his four levels of the hierarchy of Web 2.0 sites:

- Level 0 are the websites that are capable of being worked on both online and offline mode. Some of the more classified example that belongs to this category and level are the Mapquest site, Yahoo!Local and Google mapping.

- Level 1 refers to the application websites that are capable of being worked and operated offline however, has gained online features. This means you will need to be directly connected to the Internet when you would like to make use of this feature.

- Level 2 refers to the applications that are capable of being operated and used offline but will essentially be strong and powerful when used and operated online. The Flickr website is one of the class examples that belong to this level of Web 2.0 web applications.

- Level 3 are those applications that are basically Web 2.0 based. They are websites that practically work and exist when there is the Internet. Some of the more noted examples that belong to this category are Wikipedia, Craigslist and Google Adsense.

[6]

How to Spot a Web 2.0 Application

Web 2.0 applications are more simple, responsive and usable. Not only do these sites seem to load and navigate more quickly, but they seem to anticipate the information you need. [7]

Factors of Web 2.0

Every evolution is driven by key factors and this evolution of Web applications is no different.

- Social demands – Users need to find a way to interact and accomplish several activities such as reading news, mail, stock reports, etc. from one location. This can open up security issues around trusted information sources.

- Market pressures – Markets evolve in all industries segments, demanding business-to-business application layer interactions. This forces companies to adopt new technologies provided by Web services.

- Competing pressures – Competitors are moving ahead with applications scaled to run on Web 2.0 frameworks, forcing others to do the same to remain competitive. The race towards adoption of Web 2.0 framework puts extra pressure on developers and architecture.

- Technologies – Ever increasing market demands and competition have given rise to new technologies and frameworks. This is a key driving force behind industry and security vulnerabilities. New technologies mean new attack vectors, security holes and exploitation methods.

Potential Threats

There are potential threats that go along with Web 2.0, but having a secure policy in place can help to eliminate some of these threats. The following are a list of some potential threats that the Softball Production Group needs to be aware of:

- Entry Points - Web 2.0 applications are bound to open several entry points that are scattered throughout the application infrastructure. Multiple entry points to an application can increase the threat exposure and with it, the chances of developers coding errors occurring at each of these multiple entry points.

For example, RIA and Ajax driven applications use a lot of client side code to access backend applications and there are several resources buried in Ajax functions. This client side code gives an attacker a place to scan for all different endpoints or entry points to the system. Entry point scanning can lead to information disclosure and if a developer has a notion of having hidden entry points, it can backfire.

- Dependencies – Web 2.0 applications have multiple technologies, information sources and protocols. All three change vectors create security issues. Untrusted sources with callbacks can open serious security concerns.

  Many Web 2.0 applications use a callback mechanism to increase productivity and provide cross-domain access to data streams. This call back stream can become a potential threat for the end user. This callback URL can cause Cross-Site Request Forgery) CSRF and an attacker can access this information and send it back to the target site.

  The callbacks are provided to various Web services and portals, such as, Yahoo provide their search services on this callback framework. If someone needs to fetch a profile from the logged in application, it is possible to send a URL and define the parameter called callback. This way the browser automatically makes the function call and access the information stream.

- Vulnerabilities – Web 2.0 has both sever-side and client-side vulnerabilities. Attack vectors are shifting toward browser and client-side attacks.

- Exploitation – Web 2.0 opens up holes of exploitation at both the server and client ends. Web 2.0 applications are giving rise to new threats and advanced delivery mechanisms for old threats. Worms, viruses and attackers are leveraging these technologies and building clever exploits to compromise victims information. [8]

  For example, malware viruses attack Web 2.0; this type of attack involves either uploading malicious files to Web 2.0 sites or embedded Java or Ajax scripts within text input fields. When visitors reach a page containing a malicious script or download malicious files from the sites to their computers, their machines will become infected. [9]

Web 2.0 Sites

Web 2.0 has many sites. Below are only a select few of the sites that are associated with Web 2.0.

Search Engine	***Description***
Audio	Odeo is a directory and search destination website for RSS syndicated audio & video. It is used to search and explore media channels covering just about any topic or area of interest. [10]
Bookmarking	Delicious is a social bookmarking service that allows users to tag, save, manage and share web pages from a centralized source. [11] [12]
Calendar	Google Calendar is a free contact and time management web application. Google Calendar lets you share your schedule, get your calendar on the go, never forget an event, send invitations and track RSVPs, Sync with your desktop applications and work offline. [13] [14]
Chat	Campfire is a web-based group chat tool that lets you set up password protection chat rooms in just seconds. Invite a client, colleague, or vendor to chat, collaborate and make decisions. [15]
Collaboration	eSnips is a social content-sharing site, where you can publish and share any media type. There is unlimited flexibility in choosing what you want to share, and with whom, in 5GB of free space. [16]
Documents	Google Docs is a free, Web-based word processor, spreadsheet, presentation and form application offered by Google. It allows users to share and collaborate in real time, safely store and organize your work and control who can see your documents [17]

(Cont.) Search Engine	***Description***
Drawing 	Gliffy is online diagram software that you can easily create professional-looking flowcharts, diagrams, floor plans and technical drawings. [18]
	Mindmapping is a versatile Web-based mind mapping tool, delivering the capabilities of desktop mind mapping software in a Web browser with no complex software to install or maintain. You can create, edit mind maps and share them with your colleague or your friends. [19]
Feed Reader 	Google Reader keeps track of your favorite websites, shares with your friends and lets you read anywhere at anytime. [20]
News 	Digg is a social news website made for people to discover and share content from anywhere on the Web. Once something is submitted, other people see it and Digg what they like best. If your submission receives enough Diggs, it is promoted to the front page for millions of visitors to see. [21] [22]
Photos 	Flickr is an image and video hosting website. Flickr lets you upload, edit, organize, share, maps and keep in touch with people. [23]
Social Aspect: User Contribution, Recommendations and Social Networks 	Facebook is a free-access social networking website that is operated and privately owned by Facebook, Inc. Millions of people use facebook everyday to keep up with friends, upload an unlimited number of photos, share links and videos, and learn more about the people they meet. [24] [25]

(Cont.) Search Engine	*Description*
twitter	Twitter is a service for friends, family and co-workers to communicate and stay connected through the exchange of quick, frequent answers. Twitter asks one question, "What are you doing?" Answers must be under 140 characters in length and can be sent via mobile texting, instance message, or the web. [26]

Consequence of not having a Policy

It is important to have a well written and effective policy in place, especially with Web 2.0, since it can be used for blogging. Blogging is a powerful marketing and communication tool, it can pose significant security risks when not controlled, such as inadvertent (or intentional) disclosure of trade secrets and risk to a company's reputation.[27] Rules and guidelines of what is expected from employees are necessary because it could either make or break the Softball Production Group. Also, there could be a possibility that the Softball Production Group secrets are being inadvertently or deliberately passed to a competitor.

Next, I will present a sample policy for Web 2.0 within our mock company, the Softball Production Group. The Softball Production Group is introducing this new policy to its employees.

Policy

When implementing something new, such as Web 2.0 it is important to have a policy in place; employees need to know what is and is not expected of them. If employees do not follow the policy while using Web 2.0, corrective action measures could be applied to the employee, whether it is a reprimand letter or termination from the Softball Production Group.

1.0 Overview

The intentions for publishing a Web 2.0 policy are not to impose restrictions that are contrary to the Softball Production Group, but to establish a culture of openness, trust and integrity. We are committed to protecting our employees, contractors, partners, vendors and the Softball Production Group from illegal or damaging actions by individuals, either knowingly or unknowingly.

Internet/Intranet/Extranet related systems including, but not limited to computer equipment, software, operating systems, storage media, network accounts that provide electronic mail, www browsing and FTP are the property of this company. These systems are to be used for business purposes on serving the interests of the company and of our clients and customers in the course of normal business operations.

Effective security is a team effort involving the participation and support of every employee and affiliate who deals with information and/or information systems. It is the responsibility of every computer user to know these guidelines and to conduct their activities accordingly.

2.0 Purpose

The Web 2.0 policy is intended to help employees determine what information can be disclosed to non-employees, as well as the relative sensitivity of information that should not be disclosed outside of the Softball Production Group without proper authorization. This policy is also used to help prevent tarnishing the public image of the Softball Production Group.

The information covered in these guidelines includes, but is not limited to, information that is either stored or shared via any means; this includes: electronic information, information on paper and information shared orally or visually (such as telephone and video conferencing).

It should be noted that the sensitivity level definitions were created as a guideline and to emphasize common sense you can take to protect the Softball Production Group's confidential information.

An inappropriate use exposes the Softball Production Group to risks including compromise of network systems, services and legal issues.

3.0 Scope

This policy applies to employees, contractors, consultants, temporaries and other workers at the Softball Production Group, including all personnel affiliated with third parties.

The company's public information is information that has been declared public knowledge by someone with the authority to do so and can freely be given to anyone without any possible damage to the company.

The Softball Production Group confidentiality contains all other information. It is a continuum, in that it is understood that some information is more sensitive than other information and should be protected in a more secure manner. Included are information that should be protected very closely, such as, trade secrets, development programs, potential acquisition targets and other information integral to the success of the company. Also, included in the Softball Production Group is confidentiality which is information that is less critical, such as, telephone directories, general corporate information, personal information, etc., which does not require as stringent of a degree of protection.

A subset of the Softball Production Group's confidential information is the company's Third Party Confidential information. This is confidential information belonging or pertaining to another corporation which has been entrusted to this company by that company under non-disclosure agreements and other contracts.

All connectivity established must be based on the least-access principle, in accordance with the approved business requirements and the security review. In no case will this company rely upon the third party to protect the company's network or resources.

4.0 Policy

4.1 General Use

1. The Softball Production Group administrator is to provide a reasonable level of privacy, users should be aware that the data they create on the corporate system remains the property of this company. Because of the need to protect the company's network, management cannot guarantee the confidentiality of information stored on any network's device belonging to the Softball Production Group.

2. Employees are responsible for exercising good judgment regarding the reasonableness of personal use. Individual departments are responsible for creating guidelines concerning personal use of Internet/Intranet/Extranet systems. In the absence of such policies, employees should be guided by departmental policies on personal use and if there is any uncertainty, employees should consult their supervisor or manager.

3. For security and network maintenance purposes, authorized individuals within the Softball Production Group may monitor systems and network traffic at anytime.

4. The Softball Production Group reserves the right to audit networks and systems on a periodic basis to ensure compliance with this policy.

5. The Softball Production Group reserves the right to interrupt lab connections that might impact the corporation production network negatively or pose a security risk.

4.2 Security and Proprietary Information

1. The user interface for information contained on Internet/Intranet/Extranet-related systems should be classified as either confidential or not confidential. Examples of confidential systems should be classified as either confidential or not confidential. Examples of confidential information included, but not limited to are: company's private information, corporate strategies, competitor sensitive, trade secrets, specifications, customer lists and research data. Employees should take all necessary steps to prevent unauthorized access to this information.

2. Keep passwords secure and do not share accounts. Authorized users are responsible for security of their passwords and accounts. System level passwords should be changed quarterly, user level passwords should be changed every six months.

3. Use encryption for sensitive information.

4. Postings by employees from the Softball Production Group's e-mail address to newsgroups should contain a disclaimer stating that the opinions expressed are strictly their own and not necessarily those of this company, unless posting is in the course of business duties.

5. All hosts used by the employees that are connected to the Softball Production Group's Internet/Intranet/Extranet, whether owned by the employee or this company, shall be continually executing approved virus-scanning software with a current virus database unless overridden by the departmental policy.

6. Employees must use extreme caution when opening e-mail attachments received from unknown senders, which may contain viruses, e-mail bombs, or Trojan horse codes.

4.3 Unacceptable Use

The following activities are, in general, prohibited. Employees may be exempt from these restrictions during the course of their legitimate job responsibilities.

Under no circumstances is an employee of the company authorized to engage in any activity that is illegal under local, state, federal or international law while utilizing the Softball Production Group's resources.

It is also unacceptable to malign co-workers and competitors. We do not want to tarnish the reputation of the Softball Production Group.

4.4 System and Network Activities

The following activities are strictly prohibited, with no exceptions:

1. Violations of the rights of any person or the Softball Production Group is protected by copyright, trade secret, patent or other intellectual property, or similar laws or regulations, including, but not limited to, the installation or distribution of "pirated" or other software products that are not appropriately licensed for use by the Softball Production Group.

2. Unauthorized copying of copyrighted material including, but not limited to, digitization and distribution of photographs from magazines, books or other copyrighted sources, copyrighted music and the installation of any copyrighted software for which the Softball Production Group or the end user does not have active license is strictly prohibited.

3. Introduction of malicious programs into the network or server (e.g., viruses, worms, Trojan horses, e-mail bombs, etc.)

4. Revealing your account password to others or allowing use of your account by others. This includes family and other household members when work is being done at home.

5. Using the Softball Production Group to compute assets to actively engage in procuring or transmitting material that is in violation of sexual harassment or hostile workplace.

6. Making fraudulent offers of products, items, or services originating from any of the Softball Production Group's accounts.

7. Making statements about warranty, expressly or implied, unless it is a part of normal job duties.

8. Effective security breaches or disruptions of network communication. Security breaches include, but are not limited to, accessing data of which the employee is not intended recipient or logging into a server or account that the employee is not expressly authorized to access, unless these duties are within the scope of regular duties. For the purpose of this section, "disruption" includes, but is not limited to, network sniffing, ping floods, packet spoofing, denial of service and forged routing information for malicious purposes.

9. Circumventing user authentication or security of any host, network or account.

10. Interfering with or denying service to any user other than the employee's host (for example, denial of service attack).

11. Using any program/script/command, or sending messages of any kind, with the intent to interfere with, or disable, a user's terminal session, via any means, locally or via the Internet/Intranet/Extranet.

12. Providing information about, or lists of, the company's employees to parties outside of the Softball Production Group.

4.5 E-mail and Communications

1. Sending unsolicited e-mail messages, including the sending of "junk mail" or other advertising material to individuals who did not specifically request such material (e-mail spam).

2. Any form of harassment via e-mail, telephone or paging, whether through language, frequency, or size of messages.

3. Unauthorized use, or forging, of e-mail header information.

4. Solicitation of e-mail for any other e-mail address, other than that of the account, with the intent to harass or to collect replies.

5. Creating or forwarding chain letters: "Ponzi" or other "pyramid" schemes of any type.

6. Use of unsolicited e-mail originating from the Softball Production Group network of other Internet/Intranet/Extranet service providers on behalf of, or to advertise, any service hosted by the Softball Production Group or connected via the Softball Production Group's network.

7. Posting the same or similar non-business-related messages to large numbers of Usenet newsgroups (newsgroup spam).

4.6 Blogging , including using Twitter and Facebook

1. Blogging by employees, whether using the Softball Production Group's property and systems or personal computer systems, is also subject to the terms and restrictions set forth in this Policy. The use of Web 2.0 to engage in blogging is acceptable, provided that it is done in a professional and responsible manner, does not otherwise violate the Softball Production Group's policy and is not detrimental to the company's best interests. Employees of the Softball Production Group are strictly prohibited from blogging, tweeting and using facebook solely for individual personal and non-work related, social reasons. Blogging from the Softball Production Group's system is also subject to monitoring.

2. The Softball Production Group's Confidential Information Policy also applies to blogging. As such, employees are prohibited from revealing any of the Softball Production Groups confidential or proprietary information, trade secrets or any other material covered by the Softball Production Group's Confidential Information policy when engaged in blogging.

3. Employees shall not engage in any blogging that may harm or tarnish the image, reputation and/or goodwill of the Softball Production Group and/or of its employees. Employees are also prohibited from making any discriminatory, disparaging, defamatory or harassing comments when blogging or otherwise engaging in any conduct prohibited by the Softball Production Group's Non Discrimination and Anti-Harassment policy.

4. Employees may also not attribute personal statements, opinions or beliefs to the Softball Production Group when engaged in blogging. If an employee is expressing his or her beliefs and/or opinion in blogs, the employee may not, expressly or implicitly, represent themselves as an employee or representation of the Softball Production Group. Employees assume any and all risk associated with blogging.

5. The Softball Production Groups trademark, logos and any other company's intellectual property may also not be used in connection with any blogging activities.

5.0 Enforcement

Any employee found to have violated this policy may be subject to disciplinary action, up to and including termination of employment.

[28] [29] [30]

6.0 Definitions

Term	Definition
Blogging	Writing a blog. A blog (short for weblog) is a personal online journal that is frequently updated and intended for general public consumption. [28]
Bookmark	Is a saved link to a Web page that has been added to a list of saved links. [31]
Chain e-mail or letter	E-mail sent to successive people. Typically the body of the note has direction to send out multiple copies of the note and promises good luck or money if the direction is followed. [28]
E-mail	The electronic transmission of information through a mail protocol such as SMTP or IMAP. Typical e-mail clients include Eudora and Microsoft Outlook. [29]
Extranet	Connections between third parties that require access to connections non-public company's resources. [30]
Instant Messaging	IM consists of sending real time messages to another Internet user. Instant messaging is comparable to chatting in your own private chat room, with only those people you choose to invite. [32]
Internal	Within a company's corporate firewall and connected to the company's corporate production network. [30]
RSS	A Web site that wants to publish some of its content, such as news headlines or stories, creates a description of the content and specifically where the content is on its site in the form of an RSS document. [33]
Sensitive Information	Information is considered sensitive if it can be damaging to the company or its customers' reputation or market standing. [29]
Spam	Unauthorized and/or unsolicited electronic mass mailings. [28]
Twitter	Is a social networking service to communicate and stay connected through the exchange of a quick, frequent answer. [26]

6.0 (Cont.) Definitions

Term	Definition
Unauthorized Disclosure	The intentional or unintentional revealing of restricted information to people, both inside and outside of the company, who do not have a need to know that information. [29]
Wiki	A free online encyclopedia that relies on contributors to add and edit entries. [34]

Training

The first initial training for new users using Web 2.0 is a mandatory two hour seminar that they must attend. This two hour seminar will explore Web 2.0 and the shift towards incorporating progressive technologies such as wikis, blogs, data feeds, podcasting and instant messaging. Broadcasting, collaboration and social networking technologies will also be explored. Finally, a significant attention will be given to the effective management of a Web 2.0 organizational strategy.

Training Topics

- What is Web 2.0?
- What technologies are leveraged by Web 2.0?
- What sort of value proposition does Web 2.0 offer?
- How have other organizations benefited from Web 2.0?
- Can Web 2.0 be effectively managed and governed?

Training Objectives

- Identify the technology components of Web 2.0
- Identify the value-added associated with the adoption of Web 2.0 usage
- Explore successful utilization of Web 2.0 within the organization
- Explore broadcasting, collaboration, social networking and similar Web 2.0 applications
- Explore and discuss the best practices associated with the adoption of Web 2.0's usage
- Brand building and awareness over the Web
  [35]

The user will be required to take an online refresher course of Web 2.0 each year through a system called Training Management System (TMS). The TMS is a tool that the Softball Production Group developed and maintains. The TMS provides a comprehensive record of training that was completed, while at the Softball Production Group. The user will receive a reminder e-mail to take this course within a month, before the actual due date. If the course has not been fulfilled within that month, a friendly reminder will be sent to the user. If the user still does not comply to taking the course an e-mail will go to their supervisor, notifying them that the requirements for using Web 2.0 are not up to date, so the user's activity, including personal use will be suspended.

Since, the Softball Production Group is going paperless there will be a newsletter in the form of an e-mail sent once a month. The employees need to read the e-mail within a week and click the button in the e-mail, so the Softball Production Group is aware the e-mail was read. The newsletter will include information that introduces this month's security awareness topic, refer to recent news on the topic, analyzes the associated information security risks and it will include links to further information resources. [36]

There will be posters placed on bulletin boards and walls to remind employees of prevention measures when using the internet. Such as the following:

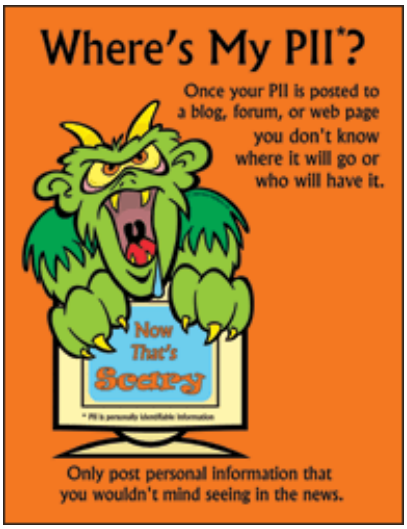

Figure 2. PII Poster
[37]

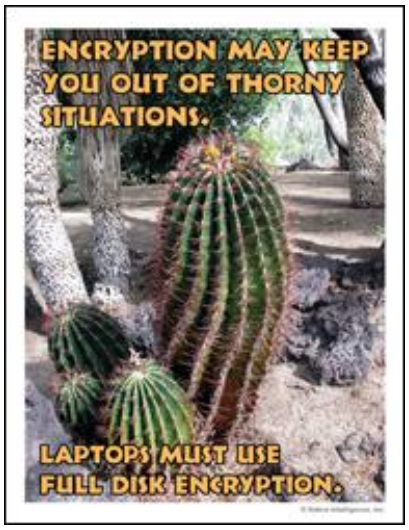

Figure 3. Encryption Poster
[37]

Cost of Training

The initial cost for training is $400.00 per employee. There will be consultants coming into the Softball Production Group to train employees on how to use Web 2.0. After the initial training the consultants will train the IT employees on the presentation material on Web 2.0. Then, when new employees arrive the IT department will have a select few employees that will run the training. When the Softball Production Group's IT department starts the training, there will be a fee assessed by the IT department in the amount of $100.00 per employee. This fee will help the IT department on the cost of equipment and software/upgrades, etc.

Assessment Plan

Before the Web 2.0 policy is released and while the policy is in force, ongoing Assessment Plans should be conducted. An Assessment Plan is defined as a review, evaluation, inspection, test, check, surveillance, or audit to determine and document whether items, processes, systems, or services meet specified requirements and perform effectively. The purpose of this assessment of the Web 2.0 policy is to support data-driven decision-making and to measure the knowledge, skills and abilities of employees. The type of assessment that is going to be done on the Web 2.0 policy is the Needs Assessment. The needs assessment is a systematic exploration of the way things are and the way they should be. There are four steps in conducting a Needs Assessment Plan.

Step 1: Perform a "Gap" Analysis

This step is to check the actual performance of the Softball Production Group and the employees against the Web 2.0 policy.

- Current situation: The company will determine the current state of skills, knowledge and abilities of our current as well as training materials available for current and/or future employees.

- Desired or necessary situation: We have to identify the desired or necessary conditions for organizational and personal success. This analysis focuses on the necessary job tasks/standards. It is important to identify the critical tasks necessary and not just observing the current practices.

Step 2: Identify Priorities and Importance of Web 2.0:

The company has to determine if the identified needs are real, if they are worth addressing and specify their importance and urgency in view of the organizational needs and requirements:

- Cost-effectiveness: How does the cost of the problem compare to the cost of implementing a solution?

- Executive pressure: Does top management expect a solution?

- Population: Are many people or key people involved?

- Customers: What influence is generated by customers' specifications and expectations?

Step 3: Identify causes of Performance Problems and/or Opportunities of Web 2.0

We will need to identify specific problem areas and opportunities in our organization. We have to know what our performance requirements are, if appropriate solutions are to be applied. We need to ask ourselves the following question:

- Do the employees have the skills needed to produce desired results? [38]

Step 4: Identify Possible Solutions and Growth Opportunities of Web 2.0

If the employees are doing their jobs effectively, we should leave it alone ("If it is not broken, don't fix it.")

However, if our employees are not doing their jobs effectively:

- If there is a knowledge problem, more training may be the solution.

- Organizational development activities may provide solutions when the problem is not based on a lack of knowledge and is primarily associated with systematic change. These interventions might include strategic planning, organizational restructuring, performance management and/or effective team building.

There are multiple methods of performing a Needs Assessment. To get the true picture, you should not rely on one method. There are several basic needs assessment techniques, such as the following:

- Direct observation
- Questionnaires
- Consultation with persons in key positions, and/or with specific knowledge
- Review of relevant literature
- Interviews
- Focus Groups

Use the data that was found to make your point to avoid confronting management, since the conclusions will follow from your needs assessment activities. Everybody should share the data collected. It is important to provide feedback to everyone who was solicited for information. [39]

This Needs Assessment technique is very effective at the Softball Production Group. In this assessment we had sent out questionnaires to our employees and conducted interviews. First, when we sent out the questionnaires, we gave the employees two weeks to complete and return the forms back to Human Resources. Human Resources and the IT department had a meeting to go over the returned questionnaires.

What we discovered on the questionnaires was some employees were still confused of what is expected of them, so at this point we took the questionnaires and conducted interviews with the employees that seemed to be confused about Web 2.0.

After the interviews with the employees, the Human Resource department put together a training class that addressed these issues that the employees are having.

As you can see, there is a minor set back with knowledge of the employees, but after the proper training class, having the Web 2.0 Policy will prove to be a success in the Softball Production Group.

Conclusion

Web 2.0 is a category of new Internet tools and technologies created around the idea that the people who consume media, access the internet and use the web should not passively absorb what is available; rather they should be active contributors, helping to customize media and technology for their own purpose, as well as those of their communities. Web 2.0 was developed by Timothy O'Reilly and Media Live International through a brainstorming session that occurred in 2004. There are several sites that Web 2.0 has to offer, such as, Odeo, delicious, Google Calendar, Campfire, esnips, Google Docs, gliffy, Mindomo, Google Reader, dig, flickr, facebook and twitter.

Web 2.0 has many advantages as you can see, but it is important to have an effective and secure policy in place. There are several factors of Web 2.0, which include, social demands, market pressures, competing pressures and technologies. If an effective policy is not in place there could be potential threats, which include, but are not limited to, Open entry points, Dependencies (multiple technologies, information sources and protocols), Vulnerabilities (server-side and client-side) and Exploitation (Worms, Viruses and attackers are trying to compromise victims' information).

Before the Web 2.0 policy is released and while the policy is in force, ongoing Assessments Plans should be conducted. The Assessment team will perform an assessment on each department to make sure that the Web 2.0 policy is effectively working in each department and if it is not working, the Softball Production Group will determine what counteractive measures need to be taken.

The Web 2.0 policy is very valuable to have in place because it sets the rules and guidelines for employees to follow, otherwise it could put the company at risk of tarnishing the image of the Softball Production Group. After the policy is in place, there has to be training, so employees know how Web 2.0 works and the risks of using this powerful networking tool. By following the measures outlined, having the Web 2.0 policy will prove to be a success in the Softball Production Group.

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