Web 2.0: How It Is Changing How Society Communicates

Anthony Manno
Adjunct Professor, Computer Science Department
Kean University, Union, NJ
amanno@kean.edu

Dr. Kamal Shahrabi
Dean, School of Engineering Technologies
Farmingdale State College, Farmingdale, NY
kamal.shahrabi@farmingdale.edu

Abstract

Web 2.0 is reshaping how we do things as a society. It is changing how we communicate with friends and in business, we are informed of important events, we shape government policy, collaborate in the classroom and at work, and find our next job amongst other everyday things we take for granted. That means that all our technology and non technology students need to understand how to use Web 2.0 technologies to help them be more productive and rise above their peers in our rapidly changing society. Web 2.0 is not just for personal networking anymore. It is becoming part of the fabric of how we communicate in our society.

Introduction

Communications in the initial iteration of the World Wide Web, or Web 1.0, was predominantly one sided. Web surfers would surf over to a website and information would be sent to their browser. That information would be absorbed and the next website would be surfed to. This is called passive viewing since two way interactions rarely occurred.

The latest version of the World Wide Web, or Web 2.0, is much more interactive. It involves people communicating their text, image and video messages to a much wider audience and with much more feedback in more real-time. It also allows people from faraway places to collaborate much more. This type of interaction and collaboration is literally changing how we communicate in our society.

Our students need to know how to most effectively use Web 2.0 technologies beyond personal use so that they can become more productive, educate themselves, protect themselves, network and get ahead in their chosen fields.

What is Web 2.0?

From a user point of view, Web 2.0 is a way to interactively share information and collaborate using the World Wide Web. Photo, video and text information is typically shared. Some examples of this include YouTube video and Flickr photo sharing, wikis allowing people from near and far to collaborate online, blogs allowing individuals to share their ideas with a large audience and social networking allowing interaction with people from all over the word that they normally would not interact with.

Why Should Web 2.0 be learned?

So much communicating and networking is done using Web 2.0 technology that it use is necessary to stay one step ahead of one's competition in our quickly evolving and competitive business world. Businesses generate more attention and talk using Web 2.0, keep their customers more efficiently informed and stay in touch with the needs of their customers. Students need it to build a bigger personal network throughout the country or world so that they can advance their career or get a new job by bypassing stacks of resumes sent the traditional way. Students also need it so that they can be one step above their peers in productivity and effectiveness by taking advantage of the latest ways to communicate that their coworkers or competitors might not be using.

Video Sharing

Video sharing sites like YouTube have drastically changed how we communicate and are communicated with. Individuals can now get their ideas out by bypassing traditional expensive media. YouTube can be used in many different areas, from frivolous silly things to trying to get a following in an area of expertise then build on that to bigger things. Viral videos get a marketing message out or just entertain. YouTube has ruined political campaigns, like a Virginia US Senator's comment interpreted as racist when running for re-election or helped political campaigns, and once in office, getting a politician's message out as President Obama currently does. It has changed how people learn about the latest happenings on TV shows to how broadcasters get their programming seen.

Those selling entertainment and marketing now need to do it with video messages that engage us much more than a thirty second commercial. These viral videos require a lot more creativity to produce, like Kobe Bryant jumping over a speeding car for Nike.

Photo Sharing

Photo sharing sites, like Flickr and Photobucket, allow users to upload photos and then post them on other websites to show them. They also allow users to post comments. This has allowed some

amateur photographers to get noticed to get paid assignment instead of hitting the pavement the traditional way.

The US State Department even uses Flickr to post photos from presidential and state department events. But, the ease and speed that allows this has caused embarrassing situations, like the Spanish Prime Minister's daughters experienced when their photos from an event were posted showing the gothic look of the daughters. Photos of the children were never published in Spain before and the Spanish public didn't appreciate the daughters' look. The photos had to be pulled down, but some sites still have them.

Blogs

Blogs are online journals that allow individuals to have a voice on the internet. Topics can be on anything that you can imagine: personal experiences, philosophical ponderings, dining out, hobbies, the thoughts from celebrities, marketing, politics, etc.

Blogging has also changed how we communicate. Bloggers have significantly impacted presidential campaigns. For example, they discredited a news report by Dan Rather on George W. Bush that led to his being let go by CBS News. They are so powerful due to the most ardent activists posting on them that presidential candidates now seek out the support of the blogging community. This leads to a more democratization of the political process where regular people can also have an impact. Some bloggers have become prominent media commentators on traditional news shows and have become White House correspondents.

Journalists now post blogs when their story can't be fit into the evening news or the newspaper. In fact, traditional media now hire columnists solely to blog. Readers can now respond to those blogs giving the journalist a better idea of how people react to the story. Some responses are used to post propaganda that sometimes gets legs and gets into the mainstream media, though.

Other people use blogs to post their thoughts on various subjects, like philosophy, saving money, crafts, etc. If it really gets an audience then they can sell advertisements on their blog and write books with the entries. Some bloggers have quit their traditional jobs and now blog full time.

Colleges use blogs to recruit prospective candidates by encouraging their students to blog about their daily lives at the university. Online savvy prospective students can read this and get a more favorable impression of the university. Instructors can use blogs to add content to their courses or as a convenient reference area for their students.

Employers use blogs for internal and external communications. They can keep their employees informed of what is going on at the company and have high profile employees use them for marketing purposes to inform customers of what products and new technologies are coming up.

Wikis

Wikis allow people from far away areas to collaborate on a project, called community editing. Wikipedia is a very well known example where anybody can change an entry. But, corporations are now using it to bring together employees that normally wouldn't talk or share information with each other. Colleges are using it to encourage students to work together on projects and labs. It is also useful in tracking the progress of a project. Each person who is responsible for a piece of the project can update the progress of their milestone in the project's Gantt chart. Now all project participants will know the latest status as quickly as possible instead of the project manager being the bottleneck.

Social Networking

Social networking sites like MySpace, Facebook and Twitter give people the opportunity to not only connect with close and long lost friends and relatives, but also entertainers (ex: actors, musicians, athletes), politicians, journalists seeking public opinion and others. They also allow people to interact and strike up friendships with people from all over the country and the world through common interests. Through these online friendships, people can learn about cultures and points of view very different from their own which in turn will broaden their horizons. Having friends from many different places also helps people to network when looking for work since being referred by someone to a job or an assignment will more likely get you in front of a decision maker than using the traditional route of blindly sending in your information. The networking site LinkedIn is especially good for this.

Twitter

Twitter can also be used to communicate marketing messages and as a way to generate traffic to websites. It is useful way for government agencies to send useful messages, as well, like information on the H1N1 virus from the CDC and food safety from the USDA. Users can get the latest news from following news sites and individuals who aren't in the media can now be the first people to post information on breaking news. An example is the businessman in NJ that was waiting for a ferry to cross the Hudson River to Manhattan was the first to take a photo of the US Airways jet that landed in the Hudson River on January, 2009. This is just one example of how regular non-media people are now part of reporting news events.

Individuals now can communicate directly with their Congressmen and other politicians. Politicians keep their constituents much better informed and ask feedback on important issues and can use Twitter to gauge how the public feels about various issues in the news.

Pro-active companies can learn how their customers view their companies by doing a simple search on Twitter. For example, Dell computers can search for "angry Dell" to find people who are angry with Dell computers then determine why and find ways to improve their customer's

experience in those areas. That would then improve customer satisfaction and people would be more likely to purchase a Dell computer. Amazon changed their decision to not rank gay themed books due to outrage on Twitter and blogs within 24 hours of implementing this change.

Twitter has also been used to raise hundreds of thousands of dollars for many worthy charities, like wounded soldiers from the Iraq and Afghanistan wars or raising money for mosquito netting to prevent malaria in Africa thus saving many lives.

Webcasts and Podcasts

Podcasts allow individuals who are not in the media business to distribute radio style shows. Webcasts can be live or pre-recorded videos that are streamed online. People can subscribe to them to be made aware of when new ones are available. Podcasts can be on virtually any topic imaginable and traditional media companies are now in the game by distributing their shows via podcasts. This is a boon to consumers since now they don't have to plan their day around programs they like. They can now listen to or watch their programs when the person is available. Universities are also encouraging their professors to post their lectures as podcasts or webcasts.

Webcasts are also being used as webinars to give a presentation on the latest technology that a company will be using. This helps educate their potential customers on the newest technologies and it allows them to pitch their products at the same time. It gives companies a much wider distribution than they would have been able to reach the traditional way thus improving sales and recognition.

You don't need to have any fancy equipment to make a webcast. A person can stream live video to people using a free service such as Ustream.tv. The viewers can communicate to the broadcaster via twitter. Entertainers and some politicians have mainly used this to its fullest effect. US presidential candidates have also used webcasting in the 2008 presidential election.

Information Overload

One of the problems of living in world where information is so readily available is information overload. A user can get overloaded from all the information available to them via Web 2.0 technology. The key is to be selective on who users will follow otherwise they will get overwhelmed and spend too much time reading, digesting and getting distracted by all this information.

Protection

All of this interaction and posting about our lives exposes us to people who might want to take advantage of us with that information. It can also allow someone like a prospective or current employer or in a future career change to take something out of context and thus have a negative impact. Users of Web 2.0 technology need to be aware that when everybody has the ability to

write anything they want, get it seen or available to be found in a search. This new rapidly changing environment is causing the law to better define who is a journalist and who and what sources should be allowed to remain confidential. Just because you are a blogger or a poster on a forum does not mean that you can say or do what you want.

Users also have to be mindful that anybody with a cell phone can take photos and videos secretly and post them online. Even if the person knew about it, but did not realize what implications it might cause. For example, some users might just want to post party pictures that shine a less than positive light on themselves. This is why users need to be aware of these risks and take protective measures. Even a Miss America from NJ almost lost her crown because of silly college photos she posted on her private Facebook account. One of her small amount of Facebook friends downloaded them and demanded that she resign, but an investigation showed the pictures did not violate Miss America rules.

Another concern is that some people a user might meet online could decide to defame the user with baseless allegations that will be available to be seen during a web search. Prospective employers and clients can now do a quick search on anybody online instead of hiring an investigator. This ease allows them to do it for everybody.

Social networking can also be used to scam, lure people into traps that can put them in physical harm and take private information and passwords. It also allows people to easily pretend to be anybody and disseminate hurtful inaccurate information.

Once something is posted online, it usually stays online somewhere and tends to have a very long shelf life, like the example of the Spanish Prime Minister's daughters above illustrates. Once information is online, it is difficult to remove it.

Conclusion

Users need to be aware of the pluses and minuses of Web 2.0 technology and how they can use it to their advantage and not get caught by the negative. They can network amongst many more people, be more productive in getting out their message to many more people and collaborate with people they normally wouldn't communicate with or know. They also need to be aware of how Web 2.0 can also have repercussions in many different aspects of privacy and how the speed and ease of Web 2.0 technologies can cause embarrassment.