

CompAct

ELECTRONIC NEWSLETTER



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WEB 2.0 OFFERS MANY OPPORTUNITIES FOR ACTUARIES

by J. Eddie Smith, IV

Editor's note: The following article is also being published in the July issue of Stepping Stone.

Two extremes bound the gradient of strategies you can take in this new era: you can ignore it all, or you can try to take it all in. Neither approach is in your best interest.

Even if terms like "status update" and "tweeting" make your skin crawl, it is becoming increasingly imperative that you at least understand what is happening and how the social landscape is changing. Finding your personal middle ground is key, and will depend on your personality, your needs and your goals in life.

It's okay if you feel lost in the blizzard of tech jargon brought on by the Web 2.0 era. There is a lot to keep up with, and new websites seem to appear daily. Knowing which to invest time in and which to ignore is a challenge, and to some degree, a trial and error process.

What The Heck Is Web 2.0, Anyway?

Consider compact discs (CDs). The first generation was read-only, meaning that you could access the information on them, but you could not add to or modify them. Web 1.0 was the read-only version of the Internet. As with the first generation of CDs, a very small minority had the means of contributing and creating content, while the majority only had the ability of consuming information.

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Later, CDs became read/write, and inexpensive technology was developed that allowed anyone with a CD burner to put information on CDs. Web 2.0, which began in 2004, is the read/write version of the Web. In this second generation of the Web, virtually anyone can add, edit and share content very easily and inexpensively. From an anthropological perspective, this is no small transformation. For much of human existence, information has been controlled and distributed by a very small subset of the population because of political factors and technological limitations. As journalist A. J. Liebling once noted, "freedom of the press is guaranteed only to those who own one." We are now entering an era in which everyone owns a press.

The early success of popular Web 2.0 media like Wikipedia, Facebook, LinkedIn, Twitter, blogs and message boards indicates not only the hunger people have for information but also their willingness to add and share information in decentralized systems. The number of sites classified under the Web 2.0 umbrella has grown so fast that the term is becoming increasingly too generic to be useful. And so many previously static sites have added features that allow for user interaction and contribution that it's all blurring into a single thing. Web 2.0 is the Web today.


The following statistics highlight the traction being gained by Web 2.0 sites:

- Social media sites are growing three times faster than the overall Internet in terms of "time spent" according to Nielsen in 2009.
- Six-year-old Facebook now has over 400 million users (exceeding the population of the United States). Half of them log into Facebook every day, and 35 million of them update their statuses every day.
- As of March 2010, users of YouTube upload 20 hours of video every minute, a rate that equals 12 centuries of video per year!
- Twitterers tweet at a rate of 50 million tweets a day, or 600 per second. This figure is up 1400 percent from 2009 to 2010.
- From LinkedIn's blog in October 2009: "LinkedIn has 50 million users worldwide and we're growing that figure at roughly one new member per second. When LinkedIn launched in 2003, it took 477 days—almost a year and four months—to reach our first million members. This last million

took only 12 days."

Actuarial Awareness of Web 2.0

In 2009, the SOA Technology and Financial Reporting Sections participated with the research firm Gartner to assess the relationship between section members and their IT staffs. One of the survey questions also inquired about the popularity of Web 2.0 tools.


Results ranged from close to half at least talking about implementing instant messaging, to less than 15 percent even having heard of crowdsourcing. Let's look at a few of these .

Crowdsourcing

If you have ever turned to an online message board to ask a question, you've used crowdsourcing. Crowdsourcing is the act of "outsourcing" a project or problem to a crowd, the members of which evaluate and ultimately offer solutions. The technology forum of the Actuarial Outpost is perhaps one of the best examples in the actuarial community. Almost daily, people go there to ask questions about Excel and a variety of other common (and not-so-common) topics.

If used wisely, the productivity gains from crowdsourcing can be great. First, there is no cost. Second, solutions to problems can be found quickly—sometimes in just minutes. And third, the person seeking an answer can work on other things while the crowd chews on the problem. It's like having free access to a legion of knowledge workers just down the hall from you. At no time in history has such a dynamic, immediate and real-time resource been available.

Wikis

Another popular Web 2.0 tool not highly recognized by respondents in the Gartner survey was the wiki. Perhaps the odd-sounding name is a distraction. Here's a little history .

In 1994, computer programmer Ward Cunningham wanted to make it easier for programmers to communicate with each other. He came up with the idea of a Web-based system wherein users could edit pages themselves. He installed the system on his company's website in 1995, and it became known as WikiWikiWeb, based on the Hawaiian word "wiki," which means "fast."

About five years later, two men, Jimmy Wales and Larry Sanger, were troubled by the lack of success of their project to create a Web-based encyclopedia called Nupedia. Their idea was to impose a strict set of rules for adding, reviewing and changing content in

Nupedia. Only experts (mostly Ph.D.s) were allowed to contribute. The model wasn't working. After 18 months and \$250,000 of expenses, Nupedia had only a dozen articles.

When Wales and Sanger learned about Cunningham's WikiWikiWeb concept, they decided to give it a try and launched a site called Wikipedia in January 2001. Unlike Nupedia, anyone could contribute to and edit Wikipedia. By the end of the first month, Wikipedia amassed 617 articles; by the end of the year, 19,000. Presently, Wikipedia has over 3.2 million articles in English alone. Nupedia and its ultimate collection of 24 articles went offline in 2003.

Wikis are so prevalent today, it's hard to imagine that they were practically nonexistent a decade ago. But in that time, they've been put to use in a variety of settings—from software documentation to enterprise collaboration to government intelligence.

Wikis can be useful to actuaries for a variety of reasons. Here are a handful:

Versioning. Wikis back up everything. If someone breaks a page or overwrites something, restoring is very easy. On the other hand, if you overwrite a Word file on your network, it's gone unless some backup process ran. Wikis back up every change.

User tracking. Want to know who changed your documented per policy expense assumption from 10 to 20? A wiki keeps up with who changed pages. This increases accountability, and also directs you to people with information you may need. For example, suppose I'm a new hire and I notice that that Joe Actuary usually updates interest rates. I know to go to Joe for more information on those rates.

Procedures openly available and readily searchable. Suppose Joe becomes ill and can't come into work for a while. I'm pretty sure that he has documented his procedures, but I have no idea where they are because they are most likely in a Word or Excel file stored on the network somewhere, or worse, stored on his hard drive or e-mail. If Joe has them in a wiki, I can go to a single search field and probably find his procedures in seconds.

Project tracking. Users can update their project status simultaneously in one, open location. No more sending those e-mails saying, "Whoever is in Spreadsheet ABC, please let me know when you're done so I can update it."

Cross-referencing. You can quickly link to past projects or integrate previously disparate areas. For example, maybe the valuation area

needs to add assumptions for a new term product. If the pricing area has the product specs stored in a centralized wiki, the valuation area can link directly to them and probably avoid retyping tons of information into individual files.

Completely searchable. Suppose new hires are coming in and need answers related to software or any procedure. These files are probably difficult for someone brand new to find. Folder structures are often intuitive only to those who created them. However, a wiki could connect someone who needs information with that information in a matter of seconds because the user doesn't need to know exactly where the information is; he or she just needs to do a keyword search.

Social networking

Even if you have no desire to engage in online social networking in your personal life, you will increasingly find it useful, if not necessary, in your professional life. For example, by participating in group discussions on LinkedIn, you can meet people who are interested in the same subjects. LinkedIn's core premise is the forging of connections in your network. A connection is made on LinkedIn when one person invites another to connect. If accepted, the two individuals can see each other's activity in a "newsfeed" appearing on each other's home page.

You may notice that one of your connections is working on or just completed a new project in an area you're interested in. These little bits of information in your newsfeed may seem insignificant, but they are actually a very powerful and efficient mechanism for joining people who need information with those who can provide it. It's a knowledge/worker matchmaking service of sorts. And it will prove to be tremendously beneficial for actuaries or any other highly skilled professionals whose numbers are not great and are dispersed throughout the world.

Additionally, LinkedIn and similar sites provide an unprecedented opportunity for interdisciplinary collaboration. By engaging in groups of interest to you, you will naturally learn from and connect to non-actuaries. This could be enormously valuable to the actuarial profession, one that has much to offer outside its traditional sphere of work.

It's very important to understand that you don't even have to be a "social" person in the traditional sense to benefit from social media sites. These new media cut through the customary face-to-face inhibitions that roadblock the same connections at traditional

meeting venues like annual meetings and symposia. What's more, sites like LinkedIn are 24/7, context-based networks that naturally evolve with you, your interests, and the time you invest in them. Once started, your network will work for you—even when you aren't online.

A well-developed, active network can be an enormous asset to a job seeker. Credibility is very difficult to fake on a site like LinkedIn. Put yourself in a hiring manager's shoes. Suppose you're evaluating two candidates. One of them sent you a one-page paper resume. The other has a LinkedIn profile, multiple connections (some of which you share), public recommendations and is also active in group discussions on LinkedIn. Who do you know more about?

The quickest way of finding other actuaries on LinkedIn is by joining actuarial groups. The SOA itself has an official group: "Society of Actuaries," as do many of the Sections, including Technology, Financial Reporting and Entrepreneurial Actuaries just to name a few. If you do a group search for "actuaries" on LinkedIn, you will find many, many more groups with actuarial members.

LinkedIn is certainly not the only social media site of professional value to actuaries. Twitter is another social network where actuaries have been emerging in the last two years. Twitter is a free service that allows you to publicly broadcast 140-character messages. The openness of Twitter allows you to connect with people that you would never find through a more context-based network like LinkedIn. Twitter has benefits beyond networking, including being one of the best sources for real-time news on virtually anything taking place in the world at any given time.

One of the quickest ways of finding actuarial Twitterers is searching for the #actuary hashtag at <http://search.twitter.com>. Hashtags are a way of tagging tweets to give them more context and they also make it easier to find people interested in that topic. Another way of finding actuaries on Twitter is by looking at the followers of popular actuaries like current SOA President Michael McLaughlin, who goes by @PrezMike2010 on Twitter. I wrote an entire article explaining the basics of Twitter in the October 2009 issue of *CompAct*; you may want to check that out to learn more about Twitter.

If you have questions on using social media or other aspects of Web 2.0, feel free to contact me or someone on the Technology Section council. We are interested in helping actuaries find ways of utilizing these new tools. You can also find more of my personal writing on these subjects at my blog: <http://risk20.wordpress.com>.

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