I MAY NOT know you, Gentle Reader, but I can say with certainty that I know a problem you have: keeping up to date, given how quickly new technologies come along in our field. In my experience, this has always been a problem in software engineering (see the sidebar “Dealing with the Pace of Change”). Our editorial board member Philippe Kruchten has even formulated a rule of thumb—that the half-life of software engineering ideas is about five years (www.computer.org/portal/web/computingnow/0409/whatsnew/software), which seems to imply a continual race to keep up with the latest ideas as the old ones become less relevant.

But a generally tough economic climate seems to have made the problem even worse. Never before have I seen such pressure to “do more with less” across organizations working in all kinds of domains: scientific, commercial, government, small companies, large companies .... The risk of not being aware of potential solutions that can help organizations change the way they do business for the better can mean not being able to get the job done in the current, resource-strapped environment.

IEEE Software aims to continue being a leading source of the information you need for this endeavor, and to do that, we need to get the information to you in the most relevant and accessible way.

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Again, I don’t know what your desk looks like, but I’m willing to go out on a limb and speculate: Somewhere, you have a pile of printed matter full of things that seem important, that you intend to get around to reading when you have time, and that makes you feel vaguely guilty from time to time when you think of it. Okay, I may be starting to project a bit too much at this point, but at least I can relate my own sense of relief when I found podcasts like advisory board member Markus Voelter’s Software Engineering Radio (www.se-radio.net). Podcasts fit much better into my schedule. They help me reclaim some of my commute, which is otherwise downtime, so I can get through much more material than if I were limited only to printed matter.

To kick off some of our own new experiments with online and digital content, we started with surveys of current and prospective readers to see how best to get our information to you. While I wouldn’t say we have a scientific study of what software professionals are looking for, we have enough interesting results to start a useful conversation—and maybe to provoke you to think of using some resources you haven’t previously tried. I’ll avoid giving you all the detail I’d usually include regarding sample sizes, response rates, and
survey details, and instead give you an overview of some of the high-level take-away points I’ve found. I hope this will be provocative enough for you to think about whether these themes match your own experiences and intuition, and share those thoughts with us.

**No One Route Reaches Everybody**

The most striking thing we’ve found from our surveys is that very few types of media are interesting to a majority of our respondents. As a baseline, we asked whether respondents frequently or always used talking with their peers as a way to keep up to date; 80 percent agreed. Print publications also performed reassuringly well (60 percent agreed), as did blogs (also 60 percent). Beyond that, however, very few media broke the 50 percent mark. To compare, some of what had seemed “obvious” technology choices scored lower than I expected, with between 20 percent and 30 percent of respondents saying that they would be useful. These choices included electronic newsletters, discussion boards on articles, video segments, and podcasts.

To me, the relatively low scores for some of these technologies do not mean they’re unimportant. Rather, they highlight the point that different media fit into our routines with varying degrees of success, probably depending to a large degree on our specific goals. To really reach a large number of people with online content, we’d need a mix of media. However, managing such a mix of resources and media types can be difficult and time-consuming, for both the creator and the recipient. This leads directly to a second finding.

**Filters Wanted**

Respondents are looking for help in sorting through all the resources that are available. We long ago left behind the problem of not having enough content sources to choose from. The difficulty now, as many of us know, is the need to navigate through all the things that aren’t relevant to our current predicament in order to find the subset that is.

Among the most popular media in our surveys were the ones that pushed out information on selected topics (like RSS feeds) or otherwise helped users get more information on content they would find most interesting and ignore the rest (for example, short summaries of articles with links to the rest of the details). Not surprisingly, respondents seemed to want help to avoid spending time on activities with no return.

Some of the least popular alternatives on our surveys were the ones that rely on user participation: Twitter, discussion boards, and attending computer-mediated meetings. To engage in rampant speculation, I suspect these media are unpopular for two reasons:

- To get the most benefit, users must somehow engage and interact actively in the conversation, which takes time.
- Although all these media can elicit some really excellent points, users have to spend time themselves weeding through the comments and tweets that are off-topic for their particular interest at the moment.

Looking for ways to separate out the most relevant content is a theme that dovetails nicely with a third finding.

**Pedigreed Content**

One way to save time is to take a look at only the best content. Because we don’t always know ahead of time which will be, people find these shortcuts useful:

- finding content from the established thought leaders in the field, rather than from unknown voices with unknown quality; and
- reading content where someone has
DEALING WITH THE PACE OF CHANGE

Helping software professionals keep their skills up to date, given the pace of innovation and change, is not just a sideline for us at IEEE Software. It’s central to what we do. That’s why we’ve assembled a set of experts from our boards and our author list to relate their own experiences in this arena and to interact with software professionals who are dealing with these challenges every day. If the idea of expert keynotes, an interactive panel discussion, a Second Life experience, and networking opportunities sounds like an appealing way to get up to speed on some of the latest approaches for staying on top of innovation, join us at the Software Experts Summit (www.computer.org/ses11), which we’re sponsoring on 17 May 2011.

Next Steps

If you weren’t able to participate in one of our surveys, I’d be happy to hear from you regarding how you currently access our content, and what additional kinds of media would help you with more convenient or more frequent access. In the meantime, using the survey results I’ve reported as a set of requirements, I’m focusing on the following:

- **RSS feeds with short article summaries:** Since respondents were looking for mechanisms to help navigate through all of the available content, we’ll be working on improving our RSS feed capabilities. Readers may not be aware that we provide abstracts of our accepted technical articles, along with links to the full paper in the Digital Library, before they appear in print at http://feeds.pheedo.com/ieee_software. We’ll be working on trying to incorporate more of our content in more user-friendly ways for readers to get a synopsis of the technical “meat” and decide whether they want to investigate further. RSS feeds were one of the rare digital content devices that seemed useful to a majority of all of our survey respondents.

- **Blogs by thought leaders:** Our board members already write a number of blogs on hot topics in the software field, all of which you can find linked at our Computing Now page: www.computer.org/cn/software. We have some additional ideas for new blogs in the pipeline, which I hope to be able to discuss in future issues. We’ll also be working on better ways to push new blog articles out to you and highlight hot topics being discussed.

- **Video interviews for special issues:** Our guest editors are looking for ways to provide short summaries of the best stuff from other raw materials.

We saw survey respondents looking for this type of value-add in a number of ways. For example, twice as many respondents felt moderated comment forums on articles are useful as thought unmoderated ones would be. Similarly, video interviews with thought leaders were twice as popular with respondents as interviews with other authors.

I feel confident that Software can easily address both types of value-added strategies. In terms of content from established thought leaders, many of our authors, guest editors, and department editors fit the bill. But I also believe we would be doing readers a disservice if we only featured the established voices of our field. The peer review process ensures that we can provide trustworthy content from less well-established authors as well. And the work done by our department editors helps bring the most interesting and most relevant content to the fore.
FROM THE EDITOR IN CHIEF

WELCOME TO NEW BOARD MEMBERS

Given our ongoing focus on expanding our digital content offerings, I’m happy to welcome two new board members who are uniquely positioned to help. Peggy Storey will be taking over as the new associate editor in chief for human factors work, and Wolfgang Strigel will be overseeing the software process coverage area.

Margaret-Anne (Peggy) Storey is an expert on how software developers use Web 2.0 technologies to support effective collaborative work. She is a professor of computer science at the University of Victoria, a visiting scientist at the IBM Centre for Advanced Studies in Toronto, and a Canada Research Chair in human-computer interaction for software engineering. She is one of the principal investigators for CSER (Centre for Software Engineering Research in Canada) and a principal investigator for the National Center for Biomedical Ontology in the US. She has an impressive track record of research publications and awards, but one of Peggy’s strengths is her interest in doing research that is directly applicable to industry. Her work has resulted in released software packages, and awards that call attention to the utility of these packages for software developers. For instance, she is a three-time winner of the IBM Eclipse Innovation Award.

Wolfgang Strigel is an independent software engineering and management consultant, with prior experience in reaching software professionals via new media. In 2003, Wolfgang launched one of the first podcasts—and the absolute first on software quality assurance topics. This “QA Podcast” was issued monthly and provided two years of interviews with leading authorities from around the world in the software quality assurance arena. He also has a long track record of leadership positions in the software industry. He has worked as the managing director of the Quality Services Division of US Technology Inc.; the founder and president of QA Labs, one of the leading North American software testing companies; the founder and president of the Software Productivity Centre, a consulting firm specializing in software process; and a vice president at MacDonald Dettwiler, a Canadian aerospace company, where he was responsible for the engineering department. We appreciate his years of service on IEEE Software boards and welcome him in this new challenge.

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Acknowledgments
I thank our board members, especially those on the Tiger Team, who spent so much time creating, publicizing, and analyzing our survey. And thank you to all the respondents who took the time to give us your opinions.