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How Web 2.0 is changing the way we work: An interview with MIT's Andrew McAfee

Web 2.0 technologies are changing the ways companies do business. But can these tools help them achieve their goals?

In recent years, using technology to change the way people work has often meant painful disruption, as CIOs rolled enterprise software programs through the ranks of reluctant staffers. Today, employees are more likely to bring in new technologies on their own—and to do so enthusiastically—through their Web browser, whether it's starting a blog, setting up a wiki to share knowledge, or collaborating on documents hosted online. Andrew McAfee, principal research scientist at the Center for Digital Business at the MIT Sloan School of Management, has been watching this shift closely. His new book, *Enterprise 2.0: New Collaborative Tools for your Organization's Toughest Challenges*, explores the ways that leading organizations are bringing Web 2.0 tools inside. McAfee calls these tools "emergent social software platforms"—highly visible environments with tools that evolve as people use them—and he is optimistic about their potential to improve the way we work.

McAfee spoke with McKinsey's Roger Roberts, a principal in the Silicon Valley office, in Palo Alto, California, in October 2009.

The *Quarterly*: *How is Enterprise 2.0 changing the way we work?*

Andrew McAfee: I think it's a lot closer to fitting into the way that we actually want to work. For me, it was really illuminating to understand the early history of Wikipedia. They always had the goal of creating an online, freely available encyclopedia. But at first, they thought the way to do that was to define a very precise, seven-step workflow of people—some of whom would be writers, some who would be editors, some who would be proofreaders—and to march everyone through that seven-step process.

And they attracted almost no energy with that approach. It was only when they said, "OK, let's forget all that. Let's just set up this weird, new thing called a Wiki, an online whiteboard where anyone can do whatever they want. And we're going to let people self-select into the roles they want to play, the content they want to create, what the articles can be about. And we're just going to see what happens."

And what they saw happen was that people were extremely enthusiastic about coming together in this way and about doing whatever felt natural to them. What was amazing to them, and to me as I looked at it, was the quality of the output they got as a result. Wikipedia is not only huge, it's actually not bad quality. And this is not something that I was expecting and that a lot of people were expecting.

The *Quarterly*: *How do you get this started in an organization?*

Andrew McAfee: There's a lot of debate about that question right now. And the debate is typically between people who advocate [a top-down approach and those who advocate] almost a purely bottom-up approach—in other words, deploy the tools, stop

worrying about what's going to happen, and get out of the way as the management of the company and let it percolate up from down below. Or, if you hear about a grassroots effort, encourage it, support it financially, but, again, get out of the way, let the bottom-up energy happen.

The other school of thought says that you need some top-down energy, or at least signaling—that this is appropriate, we want this to happen, this is in line with the goals of the organization. And the top-down school of thought says if you don't have those signals from the top of the organization, people are going to sit on the fence for a long time and they're going to wonder if this is a worthwhile use of their time, if it will increase their human capital in the organization or not. And until they have clear answers to those questions, they're going to do nothing, or they're going to sit on the sidelines.

I have a lot of sympathy for both approaches. I find myself agreeing more with the top-down crowd, though. We know how important it is for management to create culture and to signal what's valued inside the organization. These tools are not an exception to that; I think they're a great example of it.

One of my initial assumptions was after looking at the Web, you see the phenomenal growth of things like Facebook and Wikipedia and Flickr and YouTube and all that. I thought these technologies were essentially so cool that when you dropped them in an organization, people flocked to them. That was the assumption I carried around in my research.

I very quickly had that overturned. And in fact what you see is—particularly for longer-tenured workers, particularly for older workers—this is a big shift for them, changing their current work practices and moving over to Enterprise 2.0. This is not an overnight phenomenon at all. And while there are pockets of energy, getting mass adoption remains a pretty serious challenge for a lot of organizations.

I'm a fan of: deploy the tools, talk a little bit about what you want to have happen, and then find pockets of energy, highlight them, discuss them, show the good stuff that emerges. And also, again, signal from the top that this is what you want to have happen.

So, when I see executives launch blogs, either internally or externally, I get pretty optimistic, because that's a very clear signal. One of the things that makes me pessimistic, though, is when the blogs read like press releases and when they don't, for example, turn on the commenting feature on their blog, so that it's just another megaphone for an executive to shout at the organization. There are plenty of those out there already, and people don't react too well to that.

The *Quarterly*: *What else can undermine adoption?*

Andrew McAfee: [There are a] couple different failure modes that I've seen. One is the "if we build it, they will come" philosophy. Some enthusiastic people deploy some new tools, they come back and look around a couple months later, they don't see really thriving communities, and then they say, "Well, we did an experiment. It was a failure, so we're going to turn this stuff off and go back to business as usual." They don't have the patience to let people migrate over to the new way of working, and they don't invest enough time in signaling that this is actually what we want to have happen. They don't think enough about how to encourage use.

Another failure mode is to be too concerned about the possible risks and the downsides. If we get wrapped up in those, we're not going to take the plunge and actually deploy any of these new tools and turn them on and encourage people to go ahead.

The *Quarterly*: *What is the CIO's role in encouraging Enterprise 2.0 and managing the risk?*

Andrew McAfee: It reminds me of the situation we were in about a dozen years ago, when over and over again CIOs would say, "The CEO just walked into my office and said, 'What's this Internet thing, and what's our Internet strategy?'" These days the conversation is, "What's this 2.0 thing, and what's our 2.0 strategy?" So a lot of the CIOs that I work with are very clearly in the hot seat for articulating what's going on and what they're going to do about it as an organization.

A lot of them see their roles as essentially conservative, though. In other words, "My job is to not increase the risk profile of this organization before everything else." That's a legitimate concern, it's a legitimate job for the CIO, but all my experience so far tells me that Enterprise 2.0 *doesn't* increase the risk profile of an organization.

One really clever approach I heard was from Lockheed [Martin], which is a large global aerospace and defense company. It has a lot of risk concerns, a lot of very legitimate security concerns. Their executives actually got pretty excited about Enterprise 2.0 and rolled out tools that very easily could be misused in this organization. When they rolled them out, though, they made sure that every kind of contribution could be flagged if it was inappropriate. That gave everyone a sense of calm that if something bad happens, all the eyeballs in this organization can help us find it. And they have a mechanism to flag it so that it comes to the attention of the compliance department. I asked them how many posts or how many contributions had been flagged in the history of Enterprise 2.0. I believe the answer was zero.

The *Quarterly*: *What does this mean for middle managers?*

Andrew McAfee: If you're a middle manager who essentially views your job as one of gate keeping or refereeing information flows, you should be pretty frightened by these technologies, because they're going to greatly reduce your ability to do that. They're going to reduce your ability to filter what goes up in the organization and what comes down in the organization. And they're going to greatly reduce your ability to curtail who your people can interact with, talk with, and receive information from. So if you're inherently a gatekeeper, this is a real problem for you.

If you're someone who sees your job as managing people and fundamentally getting the human elements right that will lead your part of the organization to succeed, these technologies are not at all harmful to you. One of the things that we've learned is that there's no technology—even these great new social technologies—that's a substitute for face time, a substitute for understanding the human situation in your organization and trying to mold that situation to the best advantage. So if you're fundamentally a human-centric manager, these tools are not going to put you out of a job, are not going to reduce your influence at all.

If you have another view of yourself, which is that you're someone who's responsible for output, you're someone who's responsible for making good things happen in your team, then these tools should be your best friend. Because all the evidence we have suggests that Enterprise 2.0 helps you turn out more and better products and actually is *not* a vehicle for time wasting or for chipping away at what you're supposed to be doing throughout the day.

The *Quarterly*: *How should companies measure the success of Enterprise 2.0?*

Andrew McAfee: I haven't come across people who have done our old-fashioned technology ROIs[1] and are happy with it. What I've seen instead is organizations that do a bit of thinking about: What do we want to have happen? What business need are we trying to address? What challenge, what opportunity, are we trying to seize here? And then think about which exact technologies they can deploy to help them with that.

So, for example, inside the US Intelligence Community, they had a really severe knowledge-sharing problem and a problem with locating expertise—throughout this huge sprawling bureaucracy of 16 federal agencies—who knows a lot about the following topic. That was their huge challenge. [The events of] 9/11 made it very clear that that was a problem inside the intelligence community.

[1]Return on investments.

In their case, some of the most useful tools they've deployed have been simple tools like an intelligence community–wide Wiki and blogging environments where people can, the great phrase I've heard is, *narrate their work*. They can talk about what they know, what they're doing. If you add a bit of Google-flavored search on top of that, suddenly you have a very good way to find expertise, even in a very large, very decentralized organization. So that's the challenge they've faced.

Other organizations that I've looked at faced a challenge of, "We just feel like there's too much redundancy here. People are asking and answering the same questions over and over again." So they set up one central environment where you can just float up your question. The phrase I heard for that is *broadcast search*—where you're talking not about what you know but about actually what you don't know, and you're letting all the eyeballs in the organization help you with your question.

Again, you see a lot of energy, you see a lot of people very willing to take a few seconds to answer a colleague's question—even if it's a colleague they don't know. So when I see successful companies tackling this tool kit, I see them doing a little bit of thinking upfront about what problem or opportunity they're trying to address, then deploying an appropriate technology in response to that. They then measure progress: How much uptake are we getting? What's the traffic look like on this? Which is very different than measuring ROI, I think. o