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Five Researchers Helped By Web 2.0 Tools

Scientific research contains many characters familiar to anyone who has ever worked for long in a lab. I've identified five types who can find substantial benefits using Web 2.0 technologies. An organization that recognizes the abilities of these individuals will increase the rate of diffusion of innovation in the community while enhancing the organization's productivity and creativity.

1. ***The Innovators***. They are always trying something new, sometimes to the detriment of their own career. Their work is often ephemeral, as they quickly move on to something else. Because of its novelty, they are already drawn to Web 2.0 tools. These technologies can act as repositories of their work, permitting others to find the once easily lost work and build upon it. Enhancing their impact will allow others, such as early adopters, to accept innovations faster. The sooner early adopters make a change, the sooner the majority will.

2. ***The Technical Experts***. They know how to use a confocal microscope or the ins and outs of a cell sorter. They answer questions all day long about a piece of equipment or software. Moving their expertise onto a wiki by creating a simple FAQ means they do not have to repeat answers that they have given many times before. And the entire organization now has access to their knowledge, even if they are no longer around.

3. ***The Troubleshooters***. They know a method inside and out. Their expertise makes a procedure repeatable and helps others when the method does not work. Showing them how to create some SOPs for a wiki means that the troubleshooter can help more people solve more problems and understand more procedures. The tacit information about protocols they possess has been converted into explicit information available to all.

4. ***The Connectors***. They email a copy of a critical paper to the right person that turns out to enhance someone's research. People talk with them first after returning from a holiday in order to find out what has been happening. Enhancing their natural tendencies with Web 2.0 approaches means that they can accomplish more connecting over a wider social distance, while being less diverted from their own work. The information, both tacit and explicit, that they possess then moves more rapidly through a larger community than formerly possible. Adoption of new ideas progresses more rapidly.

5. ***The Subject Matter Experts***. They hold a tremendous amount of knowledge in their heads and on their computers. Making this knowledge explicit and searchable with Web 2.0 tools means that their influence increases as now everyone can find them easily. Information flow is enhanced and the majority of the community can be informed about innovations from one of its influential members.

These researchers are some of the innovators or early adopters discussed in ***The Adoption of Change in a Community***. They all are influential members of the community helping the majority adopt change. Each of these 5 types benefits the organization by their actions. Web 2.0 tools help these individuals leverage their actions, becoming more efficient, spending less time on repetitious matters and enhancing their reputation. Because of the explicit nature of Web 2.0 approaches, these benefits, which are usually hidden from any sort of quantitative metric from the company, are now visible and measurable.

By identifying and supporting the innovators/early adopters, an organization can make it easier for these opinion leaders to act as the influential community voices required by the majority of the community in order for innovation to be adopted. Web 2.0 tools also increase the flow of information, helping creating knowledge and enhancing decision-making.

Proper use of Web 2.0 tools will make an organization more creative and more capable of solving the complex problems facing us.