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Diffusion of Innovations in a Community

Every idea or innovation takes a period of time to traverse a group of people. There is never a simultaneous adoption of something novel in a large group of people. Every individual proceeds through a multi-step process of adoption that separates everyone into different groups. Some move rapidly through the process; some are more deliberative.

Many scientific institutions are organized around creative, innovative individuals. These organizations may have a higher rate of diffusion of innovations than other groups, but they are still made up of people who adopt things faster and those who adopt things slower.

Understanding the process of innovation adoption – of how human beings acquire information in order to create knowledge – can help increase the rate of diffusion of novel ideas. By becoming more efficient at transferring information and knowledge, the organizations can more rapidly make decisions and adopt innovations that will have large effects on productivity. Enhancing the process essentially makes the organizations more creative.

The following pages describe some of the important aspects of this process. The first – ***The DIKW Model for Innovation*** – describes how innovative knowledge is created, how wisdom might be achieved and why human social networks are required for any sort of innovative idea to be successful.

The second page – ***Tacit and Explicit Information*** – examines the social aspects of knowledge creation through the interconversion of the tacit information we hold in our heads and the explicit information that most companies are good at exploiting. The easier this interconversion is to achieve, the more rapidly information travels across the organizations, helping to increase the rate of diffusion of innovations.

As creative information and innovative knowledge travel through a community, they help provide individuals with the facts they need in order to make a decision about adopting a new idea or a novel tool. The third page – ***The 5 Steps to Adopting an Innovation*** – delineates the steps everyone goes through as they decide whether to use something new. This process has been observed in situations as diverse as the adoption of hybrid corn in a farming community to the purchase of hybrid vehicles.

As individuals move through the process of adopting innovations, the community becomes split into different factions – some adopting rapidly, some adopting slowly. The fourth page – ***The Adoption of Change in a Community*** – describes these factions and discusses where each of the groups obtains the information they need to begin the 5 steps in innovation adoption. Supporting key aspects of information flow to key individuals in these groups can have large effects on the rates of innovation adoption.

Some of these key individuals are discussed on the final page – ***Five Researchers Helped By Web 2.0***. It examines 5 types of individuals found in most research settings. Identifying and supporting these people will greatly help increase the rate of innovation diffusion and adoption in a community. That is because they are often the innovators or early adopters in the organizations, acting as opinion leaders for the majority of the community.

Solving complex problems requires a better understanding of the process of the creation of knowledge and the diffusion of innovations.