Social networks can strengthen knowledge-sharing

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Missouri S&T researchers say specialized social networks can strengthen knowledge-sharing in the healthcare sector.

Contrary to the notion that social networks are time-wasters, they could improve project management and the spread of specialized knowledge in the healthcare sector and possibly other large organizations, according to new research from Missouri University of Science and Technology.

In their analysis of how information is shared on social networks, three Missouri S&T researchers explain how the creation of a specialized network could improve the way information is shared via web-based knowledge management systems (KMS). Many large organizations use knowledge management systems to capture, retain and communicate project results and staff knowledge. Such systems can also prevent

knowledge drain and provide training as "lessons learned" following specific occurrences and the resolution of particular problems the staff face, the Missouri S&T researchers say.

In their paper titled "Improving Knowledge Sharing in Healthcare Through Social Network Analysis," published recently in the International Journal of Collaborative Enterprise, Drs. Elizabeth Cudney, Steven Corns and Suzanna Long of Missouri S&T's engineering management and systems engineering department examine a process for creating a social network to improve information- and knowledge-sharing for a large healthcare organization.

They discuss the development of a KMS using social network analysis to see how this combination of KMS and social network might improve methods for organizing and sharing knowledge within the organization. Through their research, they identified those in the organization who are perceived as early adopters of process improvement methods and mapped out a potential social network through which those early adopters could share their project information with others in the organization.

This allowed them to understand how changes to the work environment and procedures were perceived. The results from this preliminary work then allowed the team to devise a Likert-style questionnaire, a common survey instrument named for American administrator and organizational psychologist Rensis Likert who worked at the U.S. Department of Agriculture in the 1940s. This questionnaire was then given to all users to help the team assimilate a broad perspective on how social networking affects knowledge sharing.

Cudney, Corns and Long performed social networking mapping and analysis to characterize the relationships between the various "key players" – essentially the most influential and knowledgeable individuals

in the organization – and the knowledge links between them. They found that improvements to knowledge-sharing could be made if individuals identified by many members of staff were to form a tight, core network of their own. This would rapidly increase the ability to disseminate information on projects because this core of individuals would all have many people in their own networks.

They also found that improvements in KMS abound if the "early adopters" also form a core network as they could disseminate new ideas much more rapidly too. An additional conclusion from the work is that if technical assistance is provided early this better facilitates the creation of connections for sharing information and networking opportunities. The team adds that as with education, a higher level of engagement and stimulation makes the system that much easier for the personnel involved to benefit from the information in the system.

"While these recommendations apply specifically to this healthcare organization, these recommendations are applicable for improving knowledge sharing in any large organization regardless of industry," Cudney says.

The Missouri S&T researchers are continuing their study. The next step, they say, is to create an actual internal social network for the healthcare organization they're working with and to implement recommendations for sharing information through the social network.

  More information: The paper is available online:
www.inderscience.com/www/pdf/p … 014/ijcent_47055.pdf

Provided by Missouri University of Science and Technology