

SOCIAL DESIGN FOR COLLECTIVE INTELLIGENCE

Robert Kraut

Human-Computer Interaction Institute and the Tepper School of Business
Carnegie Mellon University
robert.kraut@cmu.edu

ABSTRACT

Collective intelligence is more likely to emerge online if the social environment is designed to overcome challenges that are common in many groups, communities and organizations. Many online groups that exhibit collective intelligence, like the Wikipedia community, depend upon volunteers with low commitment and high turnover who work in an environment without the trappings of conventional employment organizations, such as hierarchical management, employment contracts or pay for performance. Under these conditions, Wikipedia and similar communities face special difficulties recruiting and socializing newcomers and developing policies and processes that encourage their commitment and contribution.

This talk will review a program of research to understand what leads to commitment and contribution in online communities and how to better design them for these purposes. It reports on both archival research examining natural variations in group structure and interaction that predict greater commitment and contribution and experimental research deploying interventions to improve these outcomes.

The talk illustrates an evidence-based perspective on social design, in which theory and empirical evidence from the social sciences are used to structure online interaction to solve problems endemic to online groups.