Impact of Social Features Implemented in Open Collaboration Platforms on Volunteer Self-Organization: Case Study of Open Source Software Development

Abstract
The promise of collective intelligence emerging from voluntary participation, contribution and knowledge sharing brought about by ubiquitous information and communication technologies has recently attracted the attention of academics and practitioners alike. Of many related phenomena, open source software (OSS) development has been touted as one of the leading examples that speak to the potential of collective intelligence. Recently, the advent of novel open collaboration platforms for open source software development, such as Github, has prompted researchers to examine the impact of increased work transparency induced by the introduction of social features on voluntary self-organization and allocation of resources to projects. We present both qualitative and quantitative analyses from which we derive some initial propositions regarding the impact of transparency on voluntary self-organization processes and decision mechanisms.
Author Keywords
Open source software development; social computing; social coding; Github; transparency; information overload

ACM Classification Keywords
H.5.3. Group and Organization Interfaces: Collaborative computing

General Terms
Management, Design, Human Factors