## **Dissertation Proposal**

## **User Dynamics in Firm-hosted Online Communities**

Elina Hwang Wednesday, April 30, 2014 1:30PM 324 GSIA (West Wing)

With advancement of communication technology, formal organizations have increasingly introduced social media to serve for various purposes such as knowledge sharing and crowdsourcing new product ideas. This dissertation examines participant dynamics of such online communities and discusses its implications to host organizations.

The first chapter theorizes and empirically tests whether employees share knowledge within or across boundaries and how the tendencies change as a function of experience in an online knowledge community. Although mobilizing knowledge across boundaries has been touted as an advantage of online knowledge communities, we suggest that homophily still drives interaction in the communities. Because sharing knowledge to similar people is less effortful but more successful due to higher level of common ground, we proposed and found that similarity of a dyad (potential knowledge sharer and asker) predicts higher likelihood of knowledge sharing of the dyad. Further, we found that employees tend to pay more attention to deep-level similarity (expertise) and less to surface-level similarity (location and hierarchical status) as they learn about others' expertise.

In the second chapter, we examine how an innovator's knowledge breadth and depth affect various innovation outcomes in innovation crowdsourcing community. It has been argued that individuals with diverse knowledge are more innovative because a rich pool of preexisting knowledge allows more novel combinations of the knowledge. We argue that innovators who are knowledgeable on many domains can innovate only if they are able to effectively combine diverse knowledge. Further, we propose that the ability to integrate disparate knowledge is a function of whether an innovator possesses deep knowledge. As hypothesized, we found that the positive effect of knowledge breadth on innovation is contingent on the possession of deep knowledge.

The third chapter challenges the common assumption that physical propinquity does not matter in a virtual world. We argue that social distance still exists in online communities although physical distance disappears. Enhancing one's reputation is a major motivation to contribute in career-related knowledge communities. If nearby participants are inactive, a participant would be less motivated to contribute because reputation from near colleagues are perceived to be more valuable and than that from distant colleagues. Hence, we propose that a participant's decision to be active is more influenced by actions of nearby colleagues than actions of distant neighbors. This propensity is expected to result in membership herding behavior by physical location, which leads to participant pool of an online knowledge community to become more homogeneous over time in terms of their geographical representation.