## Data as Social Culture: Networked Innovation and Government 3.0

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During the past two decades, we have witnessed a change in the focus of theoretical and practical endeavors toward understanding and promoting innovations. This focus has moved from specific individuals, institutions, and their properties to their relations. However, despite the general acceptance of the positive relationship between innovation and networks, few studies offer empirical evidence for the linking of networks to innovations. In addition, with the advent of the era of 'big data' it is urgent to reflect upon certain key elements. We must examine what meanings social network data may reveal with regard to innovation and the roles played by different stakeholders. We must also find approaches for analyzing these meanings and for presenting interpretations persuasively. Thus this special issue of the Journal of Contemporary Eastern Asia (JCEA) can help us take some initial steps toward addressing how and why certain collaborations for innovations emerge and are sustained in certain ways by using various methodological approaches. While there are no simple answers for how best to optimize network connections for innovations, each of three papers in this issue begin to plot a path forward.

The three papers are outstanding original works presented at the 2nd Annual Asian Hub Conference on Triple Helix and Network Sciences (DISC) held in South Korea in 2014. The theme of the conference was "Data as Social Culture: Networked Innovation and Government 3.0", and the focus was on understanding how institutional arrangements and communication flows induce emergent knowledge-intensive clusters and networked innovations. The conference included competition for "The IMC Award." The IMC (http://theimc.co.kr), which is specialized in marketing consulting and data-mining solutions, thankfully sponsored this award at the conference in order to promote participation.

The competition for this award prompted more than 50 submissions. Papers were reviewed by the IMC award committee based on several criteria such as innovation, significance of the contribution, and professional quality and award announcements were made during the conference.

The piece by Skoric, Ju, Fu, Sim and Park is a clear illustration of the type of study that can help us understand how to improve job-related information acquisition, job mobility and entrepreneurial opportunities through social network sites and mobile telephones. Using social capital as window to examine the social networking activities of 1,042 adult Singaporean citizens or permanent residents, the authors carefully examine critical issues like job mobility, job information and entrepreneurship. The authors' findings are as novel as they are salient: while con-

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necting with friends via social network sites or mobile phones is important for career success in Singapore's business environment, the real gains can become greater when people are able to consolidate bonding social capital as compared to bridging social capital, a finding which questions the "strength of weak tines" thesis in the context of Asia. The paper also addresses the differences between social network sites and mobile services in producing different types of social capital. While professional networking via both platforms promotes the flows of job information and entrepreneurship, social network sites promote entrepreneurship but mobile phone use is more likely to enhance job mobility. More interestingly, the study suggests that business contacts via social network sites relate to neither bonding nor bridging social capital. Taking a step back and seeing the differences between Western and Eastern culture, the study suggests that business networks and friend networks may have different roles in creating bonding and bridging social capital.

The study by Xu and Feng is an attempt to understand how Chinese 'Twitterians' empower themselves through bypassing internet censorship. The study, based on 60,232 messages shared via the Twitter platform, describes the demographic and behavioral characteristics of the users involved in a Twitter-based discussion about mobilization on the issue of internet censorship, identifies patterns of interactions and social connections and examines virtual collective actions in the context of internet censorship. The study found that 68% of users disclosed at least one element of personal information. Among the disclosers, about 70% revealed location information, and about 32% disclosed their political identity or opinion. In addition, the study found that the structure of this twitter network is decentralized and sparse; there are few dominant parties, and involvement is most visible in a small set of users. Based on content analysis of the messages, the study found that the majority of messages centered around technical information sharing. This study uniquely contributes to the understanding of Twitterians' strategic behavior in the context of internet censorship and addresses the possibility of grassroots adaptation to, and activism against, internet censorship.

Finally, the study by Cho explores factors that affect the diffusion process of two mobile platforms, Apple iOS and Google Android, in a global context. The study analyzed smartphone sales data from 15 countries for the period between 2008 and 2013 and examined the effects of innovation, imitation and co-diffusion on the cross-country diffusion of the two platforms. From the analysis, the study found that innovation effects were more salient for iOS in developed countries, while imitation effects were stronger for Android in most countries. In addition, the study found that while the diffusion of Android negatively affected that of iOS, the diffusion of iOS positively affected that of Android in both developed and developing countries. This study is an excellent example of how we can create new constructs through the careful examination of extant literature and data. The author justifies his conceptualization and operationalization of the three main constructs of the study — diffusion, imitation, and co-diffusion effect — based on innovation diffusion literature and the Bass model. By doing this, the author successfully demonstrates the possibilities for analyzing the diffusion processes of competing technologies and provides important implications for practitioners who have to deal with different regional markets.

## **Appendix**

## Background information links related to DISC 2014

Call for Paper: http://www.slideshare.net/hanpark/disc-2014-cfp-v3

Conference proceedings: http://www.slideshare.net/hanpark/daegu-gyeongbuk-international-

social-network-conference-disc-disc-2014

Homepage: http://asia-triplehelix.org/DISC2014

Time table: http://www.slideshare.net/hanpark/disc-2014-program-at-a-glance

Facebook: https://www.facebook.com/disckorea

Twitter: https://twitter.com/disc2014 (Official hashtag: #DISC2014)

Blog: http://disckorea.wordpress.com/