Call for Papers

Special Issue: Organizing for Innovation in the Digitized World

Guest Editors
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Background
Rapid developments in digital technology have brought several challenges in innovation research. First, digital technology has radically reduced the communication cost for remote collaboration and coordination, which has led to the emergence of new organizing structures that transcend the traditional organizational boundaries and space limitations. Open innovation, for example, allows organizations to tap into a much broader source of new ideas by democratizing the innovation process and taking advantage of reduced communication cost and access to shared digital resources. By overcoming constraints on communication and coordination, the use of digital technology has enabled organizations to radically decentralize the way they manage innovation across networks of increasingly heterogeneous actors. Examples of such networked, distributed innovation abound: from software engineering companies that work with the global hacker community to improve their software, to manufacturing companies sourcing innovation from customers and suppliers, to mass media companies drawing on digital content created by users.

Second, change in the innovation process is also taking place due to digital convergence. The integration and embedding of digital technologies into nondigital artifacts is opening up vast new avenues for radical innovation. Integration of digital technologies, often in the form of computing, memory, and transmission capability, not only allows the products and services to become “smarter,” but also potentially transform the way the products are consumed and experienced. The embedding of global position systems chips and radio frequency identification tags into ordinary products, for example, enables the production of streams of digital data that can be combined with other forms of digital information—such as digital map on Google Earth or social networks on MySpace.com. Therefore, the notion of digital convergence that is often used to describe the bundling of phone, Internet, mobile, and TV services need to be expanded to all forms of artifact design, process change, and experience creation to theorize about these kinds of “radical” digital innovations. Radical digital convergence blurs the boundaries across industries and commerce, as exemplified by the collaboration between Apple and Nike when they introduced Nike shoes that interact with iPods. Here, organizations are confronted with heterogeneous knowledge resources that are often embedded in different pockets of the organizational hierarchy.

Third, the advances in digital technologies and software platforms now allow organizations to “digitize” multiple aspects of work processes that were previously supported by analogue tools. Digitized work practices can be modularized, integrated, and reconfigured. In the construction industry, for example, building information management systems have started to leverage new kinds of digital information infrastructures that integrate activities related to design, budgeting, scheduling, material management, and human resources. Again, we see the challenge of managing heterogeneity across organizational borders as a result of digital innovation.

We believe these and many other challenges related to rapid and radical digitization will dominate the concerns of managers in this century. Studying the full impact of digital technology on innovation, however, requires genuine cross-disciplinary dialogue. Given the novelty and speed of this phenomenon, we need richer vocabularies, diverse theoretical perspectives, new research methodologies, and novel data analysis techniques allowed by access to digital data and traces. We also need to increase the breadth of research as the impact of digital technologies can be found in many different industries,
including the healthcare, media/entertainment, automotive, tourism, telecommunication services, and construction industries.

**Topics**

The special issue is looking for original research articles that deal with several aspects of organizational innovations that are challenged by digital technology. We are interested in theoretical, empirical, and analytical papers. We are particularly interested in cross-disciplinary approaches including technology and innovation management, information systems, organizational design, strategy, and software engineering. The topics that the special issue will cover include, but are not limited to the following:

- How are the outcomes and processes of innovation changing as a result of digitalization?
- How are these processes and outcomes shaped by standards, regulation, industrial structure, and competition?
- What are the new forms of products and services that are enabled by radical digitization, and how do they transform customer experiences?
- What are the social and material characteristics of digital technology that enable radical innovation?
- How is the speed and scope of innovation enabled and affected by digitalization?
- What are the major challenges that block or hinder the deployment of digital technologies for open and radical innovation?
- How do regional and industrial clusters and their dynamics change as a result of digital convergence and radical innovation?

- How do different forms of interaction in domains such as collaboration, standardization, competition, and specialization enable, drive, and leverage digital innovation?
- What digitalization processes and features are associated with different forms of innovation including open source innovation, double-sided markets, platform strategies, etc.?
- What are the new knowledge, discovery, and integration strategies enabled and fostered by digitalization?
- What are the emerging industry structures that are enabled by digital convergence?
- What is the impact of digital convergence on organizational structures, strategies, and work processes?
- What are novel theoretical and methodological lenses that can be used to effectively study the emerging industry and organizational structures? What new theoretical constructs and vocabularies do we need to adequately describe this increasingly complex phenomenon?

**Review Process**

All authors will receive an initial screening, and only papers deemed to have a reasonable chance of acceptance after the two or three rounds of accelerated review will enter the process. A maximum of three rounds of review will be undertaken. If papers are not accepted by the third round of reviews, they will be rejected. If you have any questions, please contact Youngjin Yoo at youngjin.yoo@temple.edu or (215) 204-3058.

To be considered for publication, completed manuscripts should be submitted electronically via http://mc.manuscriptcentral.com/orgsci.