

Distributed Collaboration in Organizations and Networks (DCONs)

Derrick L. Cogburn
American University
dcogburn@american.edu

J. Alberto Espinosa
American University
alberto@american.edu

Alecia M. Santuzzi
Northern Illinois University
maguilar@american.edu

Abstract

This virtual HICSS-54 minitrack highlights the continued importance and growth of geographically distributed collaboration in organizations and networks. The ongoing global COVID-19 pandemic has highlighted and greatly accelerated this practice in most private, public, and non-profit organizations. The minitrack explores many of these questions, using a wide variety of research methods and approaches.

1. Introduction

Geographically distributed collaboration continues to be an increasingly important component of most private, public, and non-profit organizations. Interestingly, the global COVID-19 pandemic has highlighted and greatly accelerated the role of virtual teams and distributed collaboration, as well as the socio-technical factors contributing to success or failure of these virtual initiatives. Whether in corporate work teams, online education, international conferences, or even social interactions, virtual collaboration has increased exponentially over the past year. These activities are frequently conducted by persons working across multiple spatial and temporal boundaries in complex configurations. These virtual teams are characterized by multi-team memberships, member turnover, and diverse, porous organizational boundaries. Contemporary virtual teams can rarely be studied as single units because they are often mingled into larger organizational networks with multiple teams, locations, and organizational overlap. Most business, government and scientific projects and processes today have a very prominent virtual dimension. Virtual collaborators often do not have the same first language, come from different national cultures, work in different time zones, may be employed by different organizations, and enter collaborations with different expectations for group processes. These differences, among others, present unique opportunities for management and leadership.

Because of the multi-disciplinary nature of research on distributed collaboration in organizations and

networks (DCONs), our minitrack encourages submissions that inform practice and research in virtual collaboration through a variety of academic lenses. We also encouraged papers discussing methodological issues and innovation to address the complexity in the study of virtual teams, organizations, and networks. This minitrack includes papers that offer direct and indirect insights into the successful operation of virtual teams, organizations and networks, including research in the vein of computer supported collaborative work (CSCW), computer supported collaborative learning (CSCL), and social and organizational networks.

2. Mini-track Topics and Themes

The topics in this mini-track include:

- Spatial and temporal separation and its effects on collaboration
- Coordination in virtual collaboration
- Cultural differences in perception of time
- Conflict management across cultures
- Project management styles and differences across cultures
- Differences in language understanding and its effects on collaboration
- Power distance and its effects on collaboration
- Uncertainty (risk) avoidance and its effects on collaboration
- Anonymity in multicultural teams
- eLeadership
- Deception in virtual teams
- Social loafing in virtual teams
- Personality and its role in virtual teams
- Cross-cultural training
- Virtual team collaboration and innovation
- Emotion in virtual teams
- Relationship building in virtual teams
- Information sharing in virtual teams
- Collaboration and communication tools
- Differences between academic and non-academic virtual teams
- Virtual team case studies
- Social Network Analysis and virtual teams

- Identifying multi-level influences on virtual teams, organizations, and networks
- Multi-teaming in virtual collaboration
- Scientific collaboration in virtual teams (Team Science)

Our call for papers this year yielded several excellent papers that addressed some of these topics. This minitrack includes three of those papers identified by our peer review process. Collectively, the selected papers present research and practical lessons about the effective use of technology to support distributed collaboration. The papers also present experiences from the individual user and team level perspectives, both of which are essential to a comprehensive understanding of virtual collaborations.

In the following sections, we present a brief summary of the DCONs papers to be presented at the virtual HICSS-54.

3. Paper 1: Requirements for a Control Instrument of Intraorganizational Online Collaboration: A Maturity Model Analysis

The first paper seeks to better understand the factors influencing interorganizational online collaboration (IOC). IOC can be designed in various ways but there is still a backlog in how to control IOC and deriving corresponding actions. This paper aims to find and analyze approaches for an evaluation model of intraorganizational online collaboration. By using interview data, of in-depth interview with field experts the importance of an organizational control instrument for IOC is elaborated and a requirement catalogue for such instruments is deduced. This catalogue is applied in an initial analysis of maturity models (MM) as one identified approach of a control instrument for IOC. The findings show that the analyzed MMs fulfil the catalogue of requirements in different degrees and that suitable approaches exist. However, all MMs do have disadvantages and further developments of the models are required.

4. Paper 2: Mapping World Scientific Collaboration on the Research of COVID-19: Authors, Journals, Institutions, and Countries

The second paper is very timely and seeks to understand the global relationships in scientific research and publication related to COVID-19. The 2019 novel Coronavirus is the most widespread

pandemic infectious disease encountered in human history. Its economic losses and the number of countries involved rank first in the history of human viruses. After the outbreak, researchers in the field of medicine quickly carried out scientific research on the virus. Through a visual analysis of relevant scientific research papers from January 1st to April 1st, 2020, we can grasp the worldwide scientific research cooperation situation of 2019-nCoV research and reflect the international collaboration in combating the pandemic. To this end, 415 papers indexed in Thomson Reuters's Web of Science were studied to provide a visualized description of scientific collaborations across the world by multiple levels, including author level, journal level, institution level and country level.

5. Paper 3: Situational Dimensions of a Coordination Theory for Network-Based Team Management

Our final paper focuses on the digital coordination of work in emerging organizational landscapes. It sees this coordination at a critical moment of evolution. New challenges are emerging as the modern workplace of enterprises has widened from static partnerships, to open ecosystems and digital communities with highly distributed resources, teams, and activities. To address the emerging need for future work coordination models, we provided a modernization of coordination theory and proposed situational dimensions and facets of work management contexts. As the first exposition of this, we focused on team management covering formation, resourcing, structuring, and operations. The multidimensional team coordination framework was validated through an open manufacturing case study.

6. Towards a HICSS DCONs Community

Our expansion of the minitrack a few years ago has demonstrated great potential to stimulate the creation of a robust, interdisciplinary HICSS community studying geographically distributed collaboration in organizations and networks (DCONs) from a variety of perspectives. Given the increasing use of virtual teams, organizations and networks in industry, academia, medicine, and civil society broadly, such a community that uses research to inform best practices would be invaluable. The DCONs papers at this 54th HICSS represent what we see as an important trend, which we believe will remain for many years to come. It is a privilege to bring you these exciting papers and we look forward to having productive and stimulating discussions about current and future DCONs issues.