

Future of Work at the Human-Technology Frontier: Restructuring the Physical and Virtual Workspace

July 23, 2020 | 1:30 pm EDT
Zoom Workshop

About the Workshop

The National Science Foundation (NSF) seeks to understand the future of work at the human-technology frontier (FW-HTF) and develop useful, convergent research on human-technology partnerships. NSF's work will inform the design of new technologies to augment human performance, illuminate the emerging socio-technological landscape, understand the risks and benefits of new technologies (especially artificial intelligence) for workers, and foster lifelong learning. Workshop participants from industry, academia, non-profits, and government will work together to map the key issues created by rapid technological change and develop a framework for future collaboration.

Increased use of technology is disrupting work schedules, tasks, business models, even the frontier between work and non-work. Businesses and workers must define new, highly flexible relationships. These new ways of working will spill over into non-work domains of life, with implications for the way households work. The use of technology may reshape the worker's physical presence. Technologies such as alternate, virtual, and mixed realities (AR/VR/MR), telemedicine, and virtual presence will have a dramatic impact on the geography of work, perhaps affecting the growth of superstar urban areas or, at least, reshaping commuting patterns. These new technologies enable non-traditional work arrangements, such as on-demand and flexible schedules, and allow for more complete oversight of tasks and performance. Even the micro-geographies of the office—also reshaped by COVID-19—may change, with intra-office communication increasingly digital and staff physically isolated. What understanding will employers and employees reach regarding the workplace arrangement and communication under these new circumstances? How will these technologies affect the way firms organize their physical establishments and their employee teams? What will the impact of these technologies be on the spatial distribution of work?

Meeting Agenda

- 1:00 – 1:30 pm *Participants Log on*
- 1:30 – 1:35 pm *Welcome, Introductions, and Logistics*
Roland Stephen, PhD, Director, Center for Innovation Strategy and Policy, SRI International
- 1:35 – 1:55 pm *NSF's Future of Work Big Idea: Restructuring the Physical and Virtual Workspace*
Presentation and Q&A
Dawn M. Tilbury, PhD, Assistant Director, Engineering, NSF
Robert B. Stone, PhD, Director, Division of Civil, Mechanical & Manufacturing Innovation, Directorate for Engineering, NSF, and Member, Future of Work at the Human-Technology Frontier Steering Committee

1:55 – 2:25 pm	<i>Perspectives on Restructuring the Physical and Virtual Workspace</i> Panelists will provide brief remarks [5-7 minutes each] on their views of the big issues facing society as change in work and the workplace accelerates. Jinsook Han , Growth and Strategy Lead, Applied Intelligence, Accenture Mandy Pant, PhD , Academic Research Director, Intel Kathryn Zickuhr , Labor Market Policy Analyst, Washington Center for Equitable Growth
2:25 – 3:05 pm	<i>Discussion on Restructuring the Physical and Virtual Workspace</i> Facilitated discussion with panelists and NSF NSF FW-HTF Steering Committee Members, Panelists
3:05 – 3:50 pm	<i>Breakout Sessions: Opportunities and Challenges in Restructuring the Physical and Virtual Workspace</i> Facilitated breakouts with meeting participants NSF and SRI International
3:50 – 4:25 pm	<i>Breakout Session Report Back</i> Implications of breakout session output for future investments by NSF NSF FW-HTF Steering Committee Members
4:25 – 4:30 pm	<i>Wrap-up</i> NSF