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Digital Connections and Opportunities

The Future of Technology, Centered in Equity

Increased global connectivity and advancements in artificial intelligence, automation, and computational technology are shaping how we live, learn, work, and solve problems. While these new capabilities present opportunities and the prospect of advanced discoveries, new jobs, and transforming industries, they also have the potential to perpetuate inequities and divides. The COVID-19 pandemic, alongside loud and necessary calls for racial justice,¹ have put a spotlight on ever-present inequities and inefficiencies. from the digital divide², to occupational segregation³, to antiquated government systems.⁴ There is also heightened realization that communities around the world must be equipped to realize a technological future—and present—that supports and advances humanity.

Global, cross-sector intentionality is vital to developing a future of technology that fosters accessible, safe, and just digital connections and opportunities, while also fueling innovation and advancement. At the frontier of digital connectivity, we must work to build equitable access to knowledge and information; to create efficient and supportive infrastructures that modernize the systems of yesterday and ready our communities for tomorrow; empower with skills building and opportunities that ensure all communities are creators of technology, not just consumers; and to dismantle the homogeneity that is a hallmark of the technology industry. As the world navigates the rapid pace of the current technological revolution, champions across sectors are centering equity, access, and inclusion to ensure that this revolution brings all of society forward.

This conference session will explore how technology and technologists are shaping the future of digital connections for the advancement of all communities. We will discuss the myriad ways technology influences and impacts how we navigate our daily lives, and models of cross-sector strategies to center equity at this frontier. We will explore how learning, workforce, infrastructure, and global politics are interacting with—and shaping—the future of technological advancements and their impact.

¹ <https://techcrunch.com/2020/08/06/79-of-tech-workers-expect-company-solidarity-with-black-lives-matter/>

² <https://www.govtech.com/network/Opinion-Pennsylvania-Must-Narrow-Its-Digital-Divide.html>

³ <https://www.brookings.edu/blog/up-front/2019/09/11/the-differing-impact-of-automation-on-men-and-womens-work/>

⁴ <https://www.shrm.org/hr-today/news/hr-news/pages/desperate-need-for-cobol-programmers-underlines-importance-of-workforce-planning.aspx>

Track Themes and Guiding Questions

1. **Inclusive and accessible technology for lifelong learning:** What does it look like to create and use technology to enhance broad accessibility and lifelong learning? What opportunities exist when innovations designed for accessibility open a new future of tech solutions for all of society?
2. **Equity and advancement in the technology workforce:** What strategies and culture shifts are necessary for a technology workforce that reflects, includes, and supports the full diversity of people and experiences of our global society? What opportunities will emerge when this cross-cutting and influential sector fully mirrors the communities it transforms?
3. **Sustaining efficient and effective infrastructures through technology:** What role do technology and technologists have in shaping the infrastructures on which our communities are built? What are the societal implications of more effective and efficient infrastructures driven by tech?
4. **Technology to empower people, prosperity, and peace around the globe:** How do we ensure technological innovation addresses the foundational needs of global communities? How can the technology sector ensure the rapid pace of innovation advances a safe, just, and equitable future?

Further Reading

- [Will the Push for Coding Lead to ‘Technical Ghettos’?](#), Anderson, M. (2016) *The Atlantic*, February 29.
 - Primary source materials introduction and paywall view: [Access, Power, and the Framework of a CS Education Ecosystem](#). Bobb, K. and Quincy Brown. *IGI Global*.
- [The Impact of Digital Technologies](#), UN75. *United Nations*.
- Cyberstates 2020: The definitive guide to national, state, and metropolitan area tech sector and tech workforce analytics. *The Computing Technology Industry Association (CompTIA)*. March 2020. [Key Findings. Full Report.](#)
- [Why Accessibility Is the Future of Tech](#), Brownlee, J. (2019) *Medium*. September 4.
- [The Curb Cut Effect](#), Glover Blackwell, A. (2017) *Stanford Social Innovation Review*.
- [Global Infrastructure Trends: Developments in Technology](#), Capital Projects and Infrastructure Team. *PricewaterhouseCoopers*.

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